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ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2009

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BRIEFS

GDR-POLAND COOPERATION PROTOCOL--Dr Herbert Weiz, deputy chairman of the GDR council of ministers and minister of science and technology, and Prof Dr Janusz Gorski, minister of science, higher education and technology of the Polish People's Republic, concluded in Berlin on Friday [11 April] several days of consultations on the key points of the scientific-technical cooperation between the two countries in the 1981-85 period. Further steps to intensify cooperation in the field of coal refining and national, economically important tasks related to scientific-technical cooperation for the development of techniques and procedures for an effective utilization of energy, raw materials and materials as well as for rationalizing production in industry, construction and agriculture were coordinated for the 1981-85 period. Prof Janusz Gorski had an opportunity to acquaint himself in various plants with the present state of cooperation between the two countries in important fields. Jerzy Gawrysiak, ambassador of the Polish People's Republic, also participated in the signing of the joint protocol on the results of the meeting. [East Berlin NEUES DEUTSCHLAND in German 12-13 Apr 80 p 2 AU]

CSO: 2300

BETTER USE OF CAPITAL ASSETS URGED

Prague SVET HOSPODARSTVI in Slovak 22 Jan 80 pp 1, 2

[Article by Engr Blazej Sedliak, Regional Administration of the Slovak Statistical Office in Bratislava]

> [Text] Growth of capital means of production, i.e., expansion and improvement of the existing material-technical base, is a decisive factor for the growth of productivity of labor. For that reason, a more effective utilization of capital assets is one of the most important approaches to promoting economic effectiveness of industrial production.

Capital assets in industrial plants of the West Slovakia Region increased by more than one-third since the beginning of the Sixth Five-Year Plan, those of workers by almost one-third, but industrial production increased only by one-fourth, which means that qualitative indicators of reproduction deteriorated--the funding demand per koruna of industrial production increased from 1.03 Kcs in 1975 to 1.10 Kcs in 1978 and in the three quarters of 1979, up to 1.59 Kcs.

In the elapsed years of the current five-year plan, the net accumulation of capital assets in the region's industry amounted to 8.1 billion korunas, and accumulation of gross production to 5.3 billion korunas. During the specified period, the provision of workers with machinery and equipment increased by 26 percent, while productivity of labor increased by only 12.5 percent. Slower growth of productivity of labor in comparison with the growth of technical equipment is due to inadequate utilization of the output parameters of installed equipment, as well as disproportionate composition of available machinery in relation to the structure of the production process, and inadequate utilization of capital assets, both extensively and intensively.

The slackening rate of production growth with a simultaneous accumulation of capital assets led to a deteriorated evolution of indicators of complex utilization of capital funds. The effectiveness of capital assets has been declining over the past several years. Production per koruna of capital assets in 1975 amounted to 98 hellers, while in 1978, it was only 91 hellers of industrial production. Such a declining tendency applied to most sectors, except the fuel industry, metallurgy of non-ferrous metals, the chemical and the pulp and paper industries.

Inadequate utilization of capital assets became a braking force for the social productivity of labor and began to adversely influence national income. A spate of new investments in the last period did translate into renovation of equipment and, thus, maintenance of a relatively low-age structure of capital means of production, but made no substantial contribution to improving their effectiveness.

Inadequate utilization of manufacturing assets in the past years is also related to the ever increasing share of missed working days from the amount of available working time. In comparison to 1975, the utilization of available working time in the region's industry decreased by six-tenths of a point--to 92.2 percent. Working days missed due to illness or injury, computed per workers, increased from 12.8 to 13 days in 1978 and in the 9 months of 1979 amounted to 9.6 days, other paid time off (schooling, brigades, service for the good of the public, etc.) increased by six-tenths to 4.1 days, (3.2 days for the three quarters of 1979), unpaid absenteeism decreased from 1.7 to 1.3 days in 1978, but for the nine months of 1979 it already amounted to a day and a half.

Large reserves in the utilization of available working time are still constituted by unjustified absenteeism which for the past 45 months amounted to 251,000 days. This effectively means that over 300 workers did not report for work daily during the past period in the West Slovakia Region. Production losses due to unjustified absenteeism and waiting for work from beginning of the 5-year plan represent 292 million korunas. Most working days missed due to unjustified absences per workers accrued in the glass, construction, pulp and paper, machine, electrotechnical, metal working and the leather and shoe industries.

Utilization of available working time is also affected by a shortage of workers, which adversely affects the production process, as well as the economic results recorded by plants. This leads plant management first of all to replacing missing workers by overtime work or work on weekends. Overtime work increased from 5.4 percent in 1975 to 5.7 percent in 1978 and for the three quarters of 1979, amounted to 5.6 percent, which is four-tenth of a percent more than for the comparable period of 1978. In most sectors and plants that accrue many hours of overtime, available working time is not effectively utilized for a number of reasons. This is primarily due to many hours of unjustified absenteeism and a high turnover. Combined with other shortcomings, primarily with sluggish material and technical implementation of production, it bears witness to less than desirable organizational and managerial performance. Unresolved supplier-customer relations and delays in launching new lines of production raise the cost of production by spasmodic work in overtime by approximately four to six percent, transportation by roughly three percent. This may seem as a negligible increase in costs, but the fact is that even this case represents millions of korunas needlessly wasted. Overtime work could be lowered in a great number of plants by one-tenth to one-eighth, if management personnel would pay greater attention to workers who deliberately skip work shifts and systematically used the Labor Code. Time lost during working hours due to inadequate management (delays in raw materials supply, materials, technical documentation, etc.) represents more than one-tenth of available working time; time lost due to infractions of work discipline, one-seventh. The region's industry currently employs 160,000 workers. Increasing the utilization of available working time represented by the above employment figure by a mere 10 minutes a day would amount ot work output equal to the capacity of over 3,300 workers. That represents the output of the yearly increment of workers that the region's industry has been recording in the past several years.

Inadequate utilization of capital assets in industry that manifested itself in lower efficiency and higher funding demand is aggravated also by a decrease in the number of shifts worked. The coefficient of shifts worked decreased from 1,458 in 1975 to 1,442 in 1978 and dropped all the way down to 1,419 in 1979. The coefficient for shifts worked at machine work sites for the three quarters of 1979 reached 1,622, which represents a partial decrease compared to the first year of the Sixth Five-Year Plan (1,631). The highest number of shifts worked at machine work sites from the beginning of the Sixth Five-Year Plan was accumulated in the nonferrous metallurgy industry, in the power engineering, fuels, glass, textile, clothing, and pulp and paper industries.

In the machine, electrotechnical and metal-working industries the coefficient for machine work sites increased from 1,641 in 1976 to 1,644 in 1978; for the nine months of 1979, it reached 1,657. This came as a result of measures adopted for improved and more equitable utilization of machine work sites.

The share per 1,000 days worked in the region's industrial plants accruing to the second shift amounted to 254 days in 1975; in the first through third quarters of the past year, to only 240 days. Capacity represented by the first shift is utilized in subsequent shifts only by two-fifth.

The low level of utilization of production capacities at the present is due to objective as well as subjective reasons. Among the objective reasons we may include manpower shortage, particularly shortage of skilled workers, difficulties in the sphere of raw materials and energy and frequent changes in production programs. The subjective reasons include the lagging technical, organizational and technological level of production, delays in start up of capacities in reliable operation, their unsophisticated finishing and poor adaptability to new production programs. Extensive implementation of structural changes and inconsistent elimination of ineffective operations and productions. In the preceding years an added factor was a rather ineffective economic pressure on efficient utilization of capital assets. One of the main reasons for the limited utilization of these means, primarily machinery, must also be viewed as shortcomings in the managerial policy of leading economic personnel in economic production units and production plants. Many managers consider low utilization of some production facilities to be a reserve which can be used to catch up with neglected tasks. What failed to be accomplished in regular shifts is sought to be caught up with in overtime work, which is multiple shift operation would be impossible.

One of the basic prerequisites of increasing the number of shifts worked is systematic specialization, large series production, purposeful reduction in the assortment of products and relative stability in the production programs at individual plants.

The overall average of shifts worked is also considerably lowered by the high proportion of auxiliary operations that, on the average, account for roughly one-fourth of all shifts. Efforts to increase the number of shifts worked have been largely concentrating on main production operations while the number of shifts worked in auxiliary operations remains considerably lower. The low number of shifts worked in maintenance and mechanical shops is often the reason for long idle times for operational machinery and entire production facilities during second and third shifts.

The level of shifts worked in a number of plants is also adversely affected by obsolete and trouble-prone machinery and considerably outmoded and inflexible intraplant material handling.

The growth of productivity of labor, level of shifts worked and the overall efficiency of production is also substantially affected by cadre stabilization, i.e., decreasing the turnover of personnel, primarily the undesirable turnover. In the elapsed years of the Sixth Five-Year Plan the rate of undesirable turnover remained essentially at the level of the last year of the Fifth Five-Year Plan (9.5 percent). We are also constantly faced with considerable turnover in the ranks of qualified cadre. A sizable number of graduates of specialized training institutions do not wind up working in their chosen field. Turnover of personnel can be checked by implementation of social programs designed to improve the working conditions, meet the needs for apartments, improve conditions in the area of pre-school facilities and offer help to group and individual construction projects.

Purposeful improvement of the number of shifts worked calls for a well-thought-out plan of technical and organizational measures and full support of party, trade union and youth organizations. This plan must be implemented by requisite production and other measures and, last but not least, by socialist competition. It would be expedient if we put more emphasis than was heretofore the case on firming up socialist pledges for improved utilization of machinery in multiple shifts, as well as during individual shifts. Only in such a manner can we save on investments and thus preserve more means for consumption, i.e., improve the standard of living.

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BRIEFS

TAX AGREEMENT WITH CYPRUS--Prague--Czechoslovakia and Cyprus signed on Tuesday an agreement on preventing double taxation and income and property tax evasions. The agreement, signed by Czechoslovak Finance Minister Leopold Ler and Cypriot Finance Minister Avxendis Avxendiou, creates favourable conditions for development of economic cooperation and expansion of relations in other fields. [Text] [LD160731 Prague CTK in English 2004 GMT 15 Apr 80]

LENINIST SUBBOTNIK--On 19 April 17,000 employees of the Skoda Plzen enterprise worked an extroardinary shift--a Leninist subbotnik, in honor of the 110th anniversary of the birth of V. I. Lenin. Following the appeal of the Skoda workers, an additional 30,000 employees took part in the Leninist subbotnik in Plzen. [Prague LIDOVA DEMOKRACIE in Czech 21 Apr 80 p 1]

SHOCK WORKERS' SHIFTS--A total of 734,790 employees--almost 350,000 of them in centrally managed industrial enterprises--took part in the extraordinary shock workers' shifts held throughout North Moravia on 19 April to insure the fulfillment of the exacting tasks of this year, the final year of the Sixth 5-Year Plan. The shifts were in honor of the 35th anniversary of Czechoslovakia's liberation by the Soviet Army and the 110th anniversary of V. I. Lenin's birth. The participants in the shifts included more than 13,000 miners of the Ostrava-Karvina basin who extracted almost 80,000 tons of coking coal. [Prague LIDOVA DEMOKRACIE in Czech 21 Apr 80 p 1]

HOBBY GARDENERS' PRODUCTION FIGURES--At present, the Association of Czech Hobby Gardners [Zahradkari] supplies about 5,000 railroad cars of fruit and vegetables to the domestic market annually. Interest in the allocation of plots in hobby gardners' colonies is increasing; at the moment there are more than 15,000 registered applicants and the number of the nonregistered ones is considerably larger. [Prague LIDOVA DEMOKRACIE in Czech 16 Apr 80 p 3]

CSO: 2400

QUESTIONS RAISED ON ENERGY SUPPLY, PRODUCTION

East Berlin PRESSE-INFORMATIONEN in German No 26, 29 Feb 80 pp 2-3, 5

[Report by Press Office, Chairman, GDR Council of Ministers: "Answers to Questions on Energy and Material Conservation"]

[Excerpts] [Question] What are the reasons for the high demands made by the 1980 plan for conservation of energy and materials?

[Answer] In this and the next few years, the GDR economy must attain higher output targets with raw material, energy and material resources, which will remain essentially unchanged and which in certain instances will actually be decreasing. In other words, we must obtain the materials and energy needed for the planned increase in commodity output through material and energy savings, through a reduction of the specific input per product. Thus we are confronted with a totally new situation, which we will have to control, if we want to continue our program of full employment, national affluence, growth and stability under changed foreign economic conditions.

The following comparison illustrates the magnitude of the new requirements: During the five-year plan period from 1971 to 1975, the increase in economically important raw materials amounted to 3.7 percent. From 1976 to 1978, there was a 2.3-percent increase. In 1980, the amount by which the stock of economically important raw materials can be increased in the face of a continuing high rate of growth of the commodity output will be no more than 0.5 percent. This actually turns upside down the hitherto customary proportions. At the beginning of the 1970's, we secured approximately 60 percent of the increased requirements of raw materials and materials through expansion of reserves, while a mere 40 percent were obtained through material economy. In 1980 and in the following years, this share must be increased to over 80 percent.

However, there is yet another consideration that must not be overlooked. Raw materials, energy, materials and services constitute 93 percent of our production input. In 1979, that was the equivalent of over M 300 billion. This illustrates the order of magnitude that we are concerned with. If we reduce this input by a mere 1 percent, we will be able to increase the national income by M 3 billion. This is indicative of the great significance of energy and material economy. Such economy is an expression of economic common sense.

Thus we will have to draw up long-range plans to insure production gains in spite of diminishing increases in energy and raw materials. This immutable premise underlies the 1980 plan, which stipulates 4.5 to 4.7-percent reductions in the consumption of economically important raw materials and materials. This is the hitherto highest performance target in regard to material economy.

These 4.5 to 4.7 percent represent an economic average. In regard to individual, economically especially important materials, our targets are considerably higher. For rolled steel, for example, we have targeted a minimum of 6.8 percent. In other words, in the metalworking industry, the commodity output per 1,000 tons of rolled steel is to be increased from M 15 million in 1970 to approximately M 27 million in 1980.

Thus in regard to material and energy economy, too, the objective is fully to exploit our internal productive capacity and to increase it so as to be able to offset the external burdens. This must be done through consistent utilization of all available reserves.

[Question] What energy and raw material savings have we achieved so far and what do they amount to?

[Answer] In the first 2 years of the Five-Year Plan, the specific consumption of economically important raw materials and materials was reduced by 2.9 percent, and in 1978, by 3.4 percent; in 1979, it was possible for the first time to reduce this specific input by as much as 4 percent. Since 1976, consumption-reducing measures have produced material savings of approximately M 30 billion, i.e. the equivalent of 1 month's requirements of the GDR production sector. In 1979, the production gains in the GDR amounted to 4.8 percent; these gains were achieved on the basis of a mere 1.3-percent increase in raw materials.

What is true of raw materials and materials applies in equal measure to energy. In the last few years, annual primary energy increases of only 2.5 percent resulted in a 100-percent jump in the national income growth rates. By international standards, this is quite remarkable. During the period from 1971 to 1975, for example, energy-saving efficiency measures helped to reduce the consumption of general-service energy by the equivalent of 32 million tons of raw brown coal. By 1980, the savings achieved since 1976 will probably amount to approximately 40 million tons of raw brown coal.

The decree on efficient energy consumption which was passed last September by the Council of Ministers has had a positive effect on the awareness of energy problems and has produced very good material results. Analyses show that since September 1979 energy consumption in the national economy has increasingly fallen short of the upper limits established. In November 1979, for example, the consumption of electric energy decreased by 280 megawatts, as compared to the corresponding period of the preceding year. Thus the measures taken to eliminate unnecessary energy consumption in space heating, lighting and transportation have produced tangible results. The great energy and raw materials savings have created the conditions necessary for the continuous and rapid development of our national economy in the face of increasing difficulties and the obviously fruitful continuation of the successful policy oriented toward accomplishment of the main task.

However, everything depends on what standard is to be applied. What was enough yesterday is today no longer sufficient. In regard to material and energy economy, we are now concerned with dimensions that dwarf all of the targets set so far. As Erich Honecker pointed out in the discussion with the first secretaries of the SED kreis [GDR administrative unit] administrations, the relationship between available resources and necessary performance increases has undergone radical and lasting changes. The decisive improvement of energy and material economy has become a crucial prerequisite for dynamic economic growth. It is against this standard that we must measure our work.

[Question] How do we insure a sufficient supply of raw materials for our national economy?

[Answer] Day after day, our national economy consumes a tremendous volume of raw materials and materials. With production increasing, this volume does not get any smaller; however, the experience gained in the last few years and the competition initiatives aimed at producing more with less energy and fewer materials have shown that it need not increase nearly as rapidly as commodity production.

It is a truism that any production is totally dependent on the material supplies. Thus, as Erich Honecker emphasized at the 11th session of the SED Central Committee, consolidation of the energy and raw materials resources of our country is the principal element of our economic strategy.

The continuing price hikes in the international raw material markets have created a situation new to us. This particular problem affects the other socialist countries as well; in fact, it affects every country in the world. However, due to our situation in regard to raw materials and our great dependence on external markets, we are hit especially hard, stated Erich Honecker.

The agreements concluded with the socialist countries, above all the agreements with the Soviet Union, are of special importance for the continuation of our dynamic economic growth. Even today, extensive shipments of raw materials and fuel are sufficient to meet our basic requirements. From 1981 to 1985, we will receive from the Soviet Union 95 million tons of petroleum, 32.5 billion cubic meters of natural gas, 8.5 million tons of iron ore, 4.8 million tons of pig iron, 650,000 tons of aluminum, 211,300 tons of copper and 440,000 tons of cotton.

There is not a single capitalist industrialized country that in this vital area has prospects as solid as these. Moreover, in spite of the price increases in the CEMA trade, which on account of the CEMA price formation principles will be continuing, the prices of the Soviet Union are markedly lower than those of the capitalist market.

For our part, we must now make the best of these imports; in regard to oil and natural gas, for example, it is necessary to improve utilization in terms of material economy. Generally speaking, we must reduce the specific consumption of energy and raw materials and at the same time further expand our own raw materials bases. Brown coal is our most important raw material. In the 1980's, we will have to develop 21 open-pit mines under more difficult geological conditions, in order to be able to meet the annual production target of 300 million tons of brown coal. Likewise, we will step up the mining of nonferrous metal ores and the production of potash, kaolin and other domestic raw materials. In the current five-year plan period alone, we have allocated no less than one-third of the total investments to the expansion of the energy and raw materials bases.

The secondary raw materials, too, represent a raw materials reserve that should not be underrated, for as much as 10 percent of the requirements of industrial raw materials are presently met through this source, with no more than 29 percent of the accruing materials being utilized. Thus this is by no means an economically secondary matter, but one of the first order.

Summing up, one could say that our conception regarding the safeguarding of our energy and raw materials supplies is based on two pillars: Expansion of our own raw materials bases and economical utilization of the resources available to us in this field. Thus the decisive improvement of material and energy economy has become a crucial prerequisite for our dynamic economic growth.

[Question] What is the effect of energy and material economies on costs?

[Answer] The production costs are the immutable criterion for the development of material and energy economy. Thus it is not by accident that it is precisely those enterprises, whose collectives have for years done excellent work in regard to material and energy economy, which show good results in regard to reduction of production costs. After all, accounting for 60 to 80 percent, and sometimes more than that, depending on the industrial sector concerned, the material and energy costs constitute the largest share by far of the overall production costs. So if one wants radically to influence and reduce costs, one must start here.

The changes in the industrial prices of raw materials and energy have created in the enterprises and combines more favorable conditions for an effective struggle for the reduction of material and energy costs. They bring to light the actual, increased economic costs of producing our own raw materials or of obtaining them in foreign markets in those areas, where it is possible to produce decisive results in regard to economical use of raw materials and energy. These new prices force us more than ever to exploit all possibilities of material and energy economy and of reducing costs in general.

The cardinal problem in connection with the effective participation of all workers in this task consists in confronting the collectives and every single individual with the reducible costs. A clear cost breakdown is therefore imperative. In this respect, quotas for the reduction of material and energy costs must be an integral part not only of every budget, but also of every assignment sheet and of every project of the Science and Technology Plan.

The struggle for cost reduction must begin in those areas, where production expenditures are not yet in the picture: in research, development, planning and design. For example, if the design of an article necessitates high input of materials, even the most economical utilization of the materials needed for its production will offset only a fraction of the losses that are part of its design. Thus science and technology are today the principal tools for bringing about a systematic reduction in material and energy costs.

To achieve savings, it is necessary to change designs, to develop and apply new technologies, to rationalize everywhere, and to use the available resources so as to produce maximum net efficiency. Thus, under present conditions, cost reductions on the scale required mean above all high demands on the creative abilities of all workers, engineers and scientists. This is confirmed by the experience gained in many enterprises.

In the Gera Modedruck [fashion printing] VEB, for example, the material costs are to be reduced this year by nearly M 1.8 million through measures stipulated in the Science and Technology Plan. In one of these processes, printed thermo-printing paper is glued so as to make it run ahead of the blank paper; as a result, it will be possible to save approximately 118 meters of high-grade thermo-printing paper per day and thus to reduce imports by nearly 120,000 valuta marks per year.

A proven means of reducing material and energy costs is the use value/cost analysis. By comparing and analyzing costs and use value, this analysis aims to point out ways of reducing costs, while maintaining or even raising the level of quality. Such analyses also tend to disclose available material and energy reserves. Thus it is not by accident that over 50 percent of all the savings achieved by this method are material savings.

[Question] Do the higher raw material prices in the world markets affect the domestic price structure as well?

[Answer] The world market trends regarding the prices of raw materials and fuel have subjected our national economy to severe strains; these strains are intensifying and we will have to take them into consideration. We are thus confronted with a new situation which on the one hand necessitates the strictest economy and a careful handling of raw materials, energy and materials, and on the other hand that the enterprises be confronted with the price increases in the world markets and also with the increasing costs involved in the production of domestic raw materials. It is also a question of price relations, which encourage economy-related considerations in the selection of the raw materials and materials to be used.

The new industrial prices, which have gradually been introduced in the GDR since 1976, make allowance for this. The systematic changes in industrial prices saddled the enterprises with additional costs of approximately M 66 billion, part of which have been recovered. The Leuna Works provide a good example in this respect. Through extensive energy-saving measures such as process analyses and the application of scientific-technological findings, the enterprise hopes to be able to increase its output with reduced energy input, thus offsetting the higher costs resulting from the new energy prices. The new industrial prices also promote reduction of the specific consumption of raw materials and materials, increased production and improved refinement of domestic raw materials, improved utilization of secondary raw materials and industrial by-products, economical use of imports, and other measures concerning the necessary rapid increase in economic performance.

So much for the industrial prices, which do not affect the retail prices. As far as the retail prices are concerned, there will be no changes in the proven policy of stable prices for essential commodities and of low rents and service fees. And such conditions are found only in a few countries. If new products of a higher use value are marketed--and the demand for such goods is constantly rising--appropriate prices are set. As a rule, these prices must cover the costs and comprise a normal profit, which is necessary for economic accounting. Large-scale support of these prices would exceed our economic capacities.

However, we will continue to offer goods in three price categories--lower, medium and upper--with the medium category constituting the largest commodity share. None of these categories must be neglected.

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GERMAN DEMOCRATIC REPUBLIC

SED ECONOMICS CHIEF URGES MORE PRODUCTIVE INVESTMENTS

East Berlin EINHEIT in German Vol 35 No 4, Apr 80 signed to press 13 Mar 80 pp 345-355

[Article by Guenter Mittag, SED Politburo member and Central Committee secretary for economic affairs: "Socialist Planned Economy--Dynamic Process of Steady Improvement." A translation of an earlier article on the subject by the same author is published under the heading, "Planned Economy Achievements, Role of Combines Reviewed," in JPRS 74531, 6 Nov 79, No 1950 of this series, pp 35-46. For a translation of the official text of the "Regulation on State-owned Combines, Combine Enterprises and State-owned Enterprises," referred to below, see JPRS 75361, 24 Mar 80, EAST EUROPE REPORT: POLITICAL, SOCIOLOGICAL AND MILITARY AFFAIRS No 1774, pp 44-75 (including West German commentary). An East Berlin NEUE JUSTIZ assessment of the regulation is translated under the heading, "Key Aspects of New Combine Regulation Examined," in JPRS 75167, 20 Feb 80, EAST EUROPE REPORT: ECONOMIC AND INDUSTRIAL AFFAIRS No 1981, pp 20-25. For translations of additional related information see items published under headings as indicated in the following JPRS issues of the economic series: "Investment Pattern, Technological Progress Criteria Examined" and "New Approach Urged for More Effective Investments," 75510, 16 Apr 80, No 1997, pp 64-73 and 84-91 respectively; "Combine System's Development, Future Tasks Analyzed" and "Prime Cost Reductions Urged to Raise National Income," 75132, 14 Feb 80, No 1980, pp 15-26 and 27-35 respectively; "Combine Methods Seen Improving Consumer Goods," 75398, 28 Mar 80, No 1992, pp 2-12; "Socialist Planned Economy Reviewed: Emphasis on Combines," 73657, 11 Jun 79, No 1905, pp 83-94; and "Increased Responsibilities Expected from Combine System in 1979," 72644, 17 Jan 79, No 1841, pp 9-28]

> [Text] Proceeding from its historic superiority, the socialist planned economy is being described as a process of steady improvement, with evidence adduced to its being increasingly better able to develop the modern productive forces and use them for the good of the people and to shape fundamental economic and social processes with prescience. It is being shown what current tasks we have to solve along with it. The focal point lies in achieving a much greater value growth

> from our available raw materials, making a better use of our material and intellectual potential, further consolidating our combines and improving our planning.

Even during his analysis of imperialism, Lenin, relying on the rich theoretical insights by Marx and Engels, developed the basic characteristic features of the socialist planned economy. Through his masterly handling of the dialectical method, he demonstrated that the process of the socialization of production under monopoly capitalist conditions would come close to socialism. By bursting the capitalist property relations, Lenin foresaw, the socialist revolution would clear the path for the development of the productive forces for the good of the people. Led by their Marxist-Leninist party, the working people become the conscious shapers of their social conditions and develop the productive forces as means for increasingly better satisfying the needs of society and of each individual. That is the meaning and purpose of the socialist planned economy by which the great historic advantages of the socialist social order, based on the political power of the workers class and on socialist property, are brought to realization for the good of the people.

Historically Superior

The successful development of the Soviet Union provides convincing evidence for the vitality of the socialist planned economy. Not only did socialism and its planned economy make possible overcoming the historically conditioned backwardness of pre-revolutionary tsarist Russia, to catch up with the then already industrially far advanced capitalist industrial countries in North America and Europe. Surpassing them even in important respects became possible too. In all this, the planned economy had to stand up to the harshest fitness tests: the counterrevolutionary imperialist intervention from the outside, its most massive design being the fascist attack on the USSR. It has passed even the most severe tests in such a way that today the great strength and power of socialism are making imperialism aware of its own limits. Within a brief period of history a production and economic potential has been created through which the most modern achievements of science and technology are developed and used on behalf of the people for the strengthening of socialism and the safeguarding of peace.

For more than three decades, the socialist planned economy has also been the basis for the blossoming and strengthening of the socialist state on German soil, our GDR. Led by the SED, the workers class and all working people on the territory of today's GDR have used the historic chance arising from the Soviet Army's act of liberation and the victory over Hitler fascism after 1945. Using that chance also meant creating the foundations of the socialist social order, and this in accordance with the universal principles of Marxism-Leninism, scientifically sound and tested throughout the social practice of the class struggle, as first so successfully developed in the socialist Soviet Union.

Thanks to the socialist planned economy, the GDR quickly surmounted its imperialist legacy in the form of all the factories, housing and cultural buildings in rack and ruin. It surmounted by steady economic growth the consequences of the split of Germany engineered by the Western powers. If we then at the Eighth SED Congress were in the position to decide on the main task policy for the benefit of the people and to bring it successfully to realization in implementation of the ninth party congress resolutions, it was and is possible only because the socialist planned economy has a firm footing in the GDR and is always being improved further. Those fundamental party resolutions established the substantive concept for the five-year plans and the annual economic plans. It has stood up perfectly, as demonstrated by the experiences in its implementation. At the same time, the mandatory state plans decreed by the law of the People's Chamber also proved indispensable for directing the competent managers' unified acts toward the implementation of the party resolutions. It is because the organization of all our production and economic activity has been based on our socialist planned economy that Central Committee General Secretary Comrade Erich Honecker could draw up such an impressive balance-sheet at the 11th Central Committee plenum. It is worth reflecting on what it means and why it was possible that the long-term production and consumption targets have systematically been met already for almost a whole decade, and this not only in an overall sense but in a great number of concrete requirements for industrial branches, products, positions in commodity supplies, social consumption, particularly housing, and quantitative and qualitative parameters of various kinds. In capitalist countries they do not even dream of such a harmoniously correlated economic development.

Our steady economic development and our ability to cope with the extremely complicated problems in the transition from capitalism to socialism and in the shaping of developed socialism impressively prove the strength and superiority of our socialist planned economy. Whereas the class enemy in the tough years when we got started prophesied our economy bankruptcy, life itself has demonstrated that an economy has arisen in the GDR that has all the potentials for ensuring an expanded reproduction on a modern scientific-technical basis as well as for satisfying at a steadily higher level the material and cultural needs of the people. The workers class and all working people in the GDR have accomplished a great historic achievement in creating under complicated conditions this well functioning and crisis-free economic organism that is oriented to the good of the people. Today the GDR's socialist planned economy, its vitality tested through class struggle, is a healthy and strong, solid and mature organism, powerful enough to meet all the demands of the present and future.

In properly assessing the effectiveness of our economy, it is of the highest significance that despite fundamentally altered foreign economy conditions both our steady economic growth and the steady implementation of our sociopolitical goals have been maintained. That will continue to be so because the socialist planned economy is flexible and dynamic enough to tap new reserves for a higher growth in efficiency on the basis of its effectiveness.

What makes all the difference here and offers the guaranty for it comes from the great obligations the combines have assumed for the fulfillment and overfulfillment of the 1980 economic plan. Developing the inexhaustible strength of the working people and directing their initiative to strengthening their socialist fatherland also is the way to secure, and further develop step by step, the material and cultural standard of living the people has achieved.

Of course, in assessing the effects and advantages of the socialist planned economy, what matters are not only material results, important as they are for the existence and progress of society and of each individual. The possibilities that are inherent in the planned economy in forecasting fundamental economic and social processes and in making sure that targets assigned are in fact met provide millions of people with the certitude that what they do today becomes the basis for their future life, that the results of their labor serve socialism, and thus also serve peace, and that they can live in social security and safety. That gives them confidence in our future. This important social and deeply humane effect of our socialist planned economy, which increasingly becomes the source for new and great creativity, is a thing of which the citizens in our country ought to be made still more strongly aware. These are facts that weigh all the more heavily in times when millions of working people in capitalist countries are exposed to an insecure subsistence with prices rising through inflation and to increasing unemployment, whereby they become depressed by a sense of meaninglessness and emptiness in their lives.

While the socialist planned economy learns to deal better and better with the fundamental economic requirements of our time, the capitalist countries find themselves less and less able to do so, and the internal antagonistic contradictions are intensifying there. They become a source of aggressive and adventurist foreign policy that seeks to solve domestic problems at the expense of other countries. Great efforts are being made right now to establish U.S. monopoly control over the petroleum sources in the Near and Middle East and other areas in the world and to secure the free flow of profit into the pockets of the multinational oil corporations under the slogan of the "free flow of petroleum." And U.S. imperialism has no qualms at all to trample other states' sovereignty underfoot. Unabashedly they are even raising claims to the oil sources of their neighbor, Mexico, a country well known for its peace-loving foreign policy which does what it can to use its economic independence for economic progress and its people's standard of living.

While insecurity emanates from the imperialist United States on account of its own crisis situation and the independence of the nations is threatened, the forward march of the Soviet Union and its relations with its fraternally allied socialist countries demonstrate how on the basis of the planned economy continuity and stability mark developments and new sources of strength arise. How beneficial that is for our country's further advances is attested to, among other things, by the fact that the GDR, based on the specialization and cooperation program with the USSR up to 1990, already has sound future prospects, through state agreements, for being supplied with important raw materials, production equipment and consumer goods for the next five-year plan period. And so, through fraternal cooperation within the socialist community, the strength of socialist planned economy increases exponentially by way of socialist economic integration.

Farsighted Solution for Long-Range Matters

The socialist planned economy allows the modern productive forces to be developed and controlled in their dynamics and used for the benefit of the people. This gives us at present the task--as Comrade Erich Honecker confirmed in his speech to the kreis first secretaries on the implementation of the 11th Central Committee plenum resolutions--to combine the advantages of our socialist society more effectively with the scientific-technical revolution. In concrete terms this amounts to a heavy demand for still better using the possibilities of our socialist planned economy, a high obligation for solving long-range matters of strategic importance, both with regard to their sound preparation and their purposeful implementation. The scientifically sound party policy, which aims at fully meeting this heavy demand, is crucially prerequisite to making our planned economy more effective.

Through steady work, our party's Central Committee, under the direct leadership by its General Secretary Comrade Erich Honecker, has for some time been analyzing the new demands arising for the GDR from the development of the productive forces and the ongoing foreign economy processes. All accessible sources of knowledge are used to that end, including materials prepared for the new technologies by noted scientists. The importance of all these processes for the social development of the GDR has been evaluated, and from an overall economic analysis a comprehensive requirement has been elaborated.

The analysis established that the GDR can tackle the tasks decided on for the further shaping of the developed socialist society by proceeding from solid starting positions. With that in view, the Central Committee at its 11th plenum has confirmed its resolve to continue the implementation of the main task in its unity of economic and social policy through higher achievements and increasing efficiency, and to ensure, and further develop step by step, the standard of living the GDR people has achieved. That our party came out with this pronouncement, even though due to the price rise for raw materials and fuels on international markets a new situation has arisen for us, makes convincingly clear: as seriously as we are concerned with these economic changes, we are equally serious about our political obligation to do what we can, in the sense of the main task, for the all-round strengthening of the GDR. With realism and circumspection we shall observe the clear strategic concept for the economic development of the GDR, which already contains important answers for newly ripened questions. Here we can take advantage of the fact that our party has already established in years past the fundamental directions for strengthening the material-technical base of the GDR in a manner that enlarges our own potentials. By solving the current tasks resulting from it always with a view to the future, we enhance the guaranty for our steady advance.

The key issue of our economic strategy lies in extensively improving the efficiency and quality of labor. That includes high scientific-technical achievements in decisive areas, a more effective use of our energy and raw material base and our basic assets, and the most rational investment of our country's labor resources, in other words, all that goes into the needed thrust in rationalization. The focal point of it goes to the conceptions decided on by the Politburo for an accelerated development and application of microelectronics, the use of industrial robots, of providing more machines with electronic controls, and more installations using electronic computer technology. By purposefully applying such most up-to-date scientific-technical data in novel technologies and procedures, we have undertaken a new and higher level of socialist rationalization. Its application enables the enterprises and combines to improve their labor productivity by multiples in comparison with traditional methods, while they can significantly cut back in jobs. The use of microelectronics, furthermore, creates the prerequisites for great savings in materials, raw material and energy at unprecedented dimensions. On microelectronics depends the development and supply of the kind of products--means of production as well as consumer commodities--which in their quality, function and precision meet entirely new demands and, through export, provide us with much foreign exchange. All this points to the fact that microelectronics is a genuine key technology. It controls the economic level of labor productivity as much as that of our energy and material conservation and the scientific-technical level of our products. An accelerated application of microelectronics thus means coping with essential developmental problems of our economy.

We have already started in the GDR--in close cooperation with the Soviet Union--to create important prerequisites for the development and production and even the application of microelectronics. And it has turned out to be the right thing to accelerate the development of microelectronics significantly. Already the GDR economy possesses by no means insignificant scientific-technical and even production capacities for making microprocessors as well as for the materials that have to go into them. Of the greatest importance is that our industry has an efficient technical base for producing certain equipment in the microelectronics field. Thereby the GDR--in conformity with its importance as a developed industrial country--creates through planning important scientific-technical and technological capacities for microelectronics production to live up to the demands of the future.

Experience has shown that the greatest advances in socialist rationalization are made where enterprises use their own ways and means for it instead of merely waiting for the state to provide them with investments and equipment. That is why the economic plans include the task to raise their own construction of branch-specific means of rationalization and to carry out increasingly the requisite construction measures for their rationalization by means of their own capacities. There is nothing makeshift about this. It is a basic means for introducing modern, new technologies without delay. The user bears the principal responsibility for it. Between 1975 and 1979 alone, the volume of means of rationalization produced in the industrial enterprises themselves has tripled and now has reached a total of M 2 billion. Some 14 percent of all invested equipment is produced by the enterprises this way. And that precisely is what gives us the most effective production boost. This, after all, normally pertains to the most modern and productive equipment. That is the only way for handling the 11th plenum requirement and achieving our thrust in rationalization and for further boosting our own efforts.

More and more our economic advances depend on our significantly enlarging the proportion of rationalization investments. International comparisons greatly urge us to make fundamental changes in the ratio between new construction and rationalization in our economy. It is indeed a key issue in our economic policy to place our investments, which we can increase only to a certain degree, as economically as possible. The demand for a higher performance does not justify our asking for more investments. What we rather have to do is increase our production by more productive investments and by a more targeted placement of them. And that is why those rationalizations are the best which by means of the least investment expenditure derive the greatest increase in performance from every mark invested. What matters thus is to use the investments much more still for rationalization, for introducing science and technology data and mainly for modern technologies that save manpower. And that precisely has been the basic concern of the joint Politburo and Council of Ministers resolution on improving the efficiency of our investments for further strengthening the GDR's economic efficiency. If the advances we need are to be achieved, we must in principle confront those managers who operate with the idea expressed somewhat like this: first let's start an investment, and then we shall see what happens. Instead, what is necessary is to start a new project only when it meets the criteria of the 11th Central Committee plenum. Only what meets those criteria may be started or continued.

Much Greater Values From Raw Materials Available

It is part of our comprehensive analysis of the strategic developmental conditions of the GDR economy to take into account the new economic importance of the energy and raw materials industry for our economic growth. We have to succeed in years to come and ensure our production boosts by using much less energy, material and raw materials. More than two thirds of the raw material and material requirements for the production growth of our economy have to come from a higher materials economy. That calls for a most efficient and thrifty use of energy itself, the rational use of the energy sources in energy production, and a higher degree of refinement for the raw materials altogether. The fundamentally altered conditions in the raw materials industry call for new thought and computations regarding the structure of our raw materials utilization, inasmuch as the efficiency criteria in effect have been raised considerably. For that reason, for instance, more of a materials economy in the use of petroleum in conjunction with a further development of carbochemistry, for which our prerequisites are sound because of our soft coal, is going to constitute still more strongly our firm foundation for ensuring the raw materials and energy base of our economy in the coming decade. Greater economic weight is going to attach to our using our own soft coal. More rigorously will we be moving toward developing our own energy and raw material base in line with the Ninth SED Congress resolution. Thus the socialist planned economy in the GDR, under our party leadership, proves itself capable to react in time and with great elasticity to fundamentally new structural requirements in the economy and to preserve the continuity of our overall development at the same time.

As far as the benefit of a resolute reduction of our energy investments on the whole is concerned, economic computations prove that efforts in saving energy and in making better use of our raw materials always are smaller by multiples than any efforts in building additional energy production capacities or providing energy sources through imports. The rational utilization of waste heat, for instance, requires only from one-third to one-fifth of what would be required for producing the same amount of heat from soft coal. That there are in fact reserves still available everywhere is attested to by the initial results of the implementation of the resolution on the most rational use and conservation of electrical energy, heat, fuels and propellants and on the elimination of energy waste. As it is, for example, in November 1979 already 280 megawatt of electricity less was consumed than in the same month the year before. Home heating requirements were down by 6 to 7 percent. That corresponds to a raw coal equivalent of circa 300,000 tons. And to adduce a final example: by establishing energy consumption limits for 1,650 enterprises in 1979 alone energy was saved equivalent to a soft coal volume of 3.5 million tons.

Such results in the struggle for highest economy in energy and raw materials consumption are noteworthy also internationally. So now we can add to our dynamics in production growth rates the dynamics in the reduction rates for energy and raw materials consumption. That not only is another confirmation for the favorable effects our planned economy has on the effectiveness of social production, it also is further evidence for how untenable the bourgeois calumnies are. After all, among the most belabored "arguments" of those inveterate fault-finders has been that the socialist planned economy could ensure production growth but not the growth in efficiency. Now, when our own scheduled economic tasks were met with a smaller investment of energy, more efficiently that is, they are making a big fuss about the fact that in our economy, instead of the 100 billion kilowatt hours of electrical energy planned under the 1979 national economic plan law only 96.8 billion were in fact produced. Getting a 4.8-percent industrial commodity production growth out of the economy through a bare 1.4-percent increase in electrical energy is, one should think, something we can be proud of. The whole world is trying, as one can see, to save energy, but not all are equally successful doing so. In not a few capitalist countries, scientists and economists have even come out with the demand that in the interest of such energy conservation production should be curbed in those countries. Our country, in contrast, has already provided practical evidence that it is possible to save energy without curbing production. And our further planning also is aimed at saving energy and simultaneously maintaining, or even raising, our production growth rate.

All this reflects a turn to a more determined efficiency improvement. We are making this turn by fully using the magnificent creative initiative of our working people and all other advantages of our socialist planned economy. The new possibilities in energy, raw material and materials conservation offer the chance to keep the growth in their consumption as low as possible, which naturally is also reflected in the volume of imports we need. Some FRG "soothsayers" simply reverse this course of affairs. They are babbling about some "growth restraints through import curbs" whereby to turn our successes in the struggle for high efficiency upside-down. The GDR, however, provides for itself the preconditions for steady efficiency improvements this year and in the future precisely by these new efficiency reserves.

A point should be made in this connection that our state, fraternally allied with the USSR and the other CEMA countries, has long-term supply guarantees for the chief raw materials, petroleum included. Only recently, appropriate agreements with the USSR have settled such deliveries up to 1985. Which capitalist industrial country as much dependent on raw material imports as the GDR could say something like it while pointing to such beneficial economic conditions like prices considerably lower than the level in the capitalist countries?

New Criteria for Using the Material and Intellectual Potentials

The SED Central Committee 11th plenum resolutions and the speech by Central Committee General Secretary Comrade Erich Honecker at the Central Committee secretariat conference with our party's first kreis secretaries offer a scientifically sound and concrete orientation for solving the tasks now confronting us in the continued successful shaping of the developed socialist society in our republic. Thereby new criteria were placed on the political work in all fields, the need for high economic efficiency improvements was, above all, convincingly explained, and those tasks were assigned through the solution of which we are fulfilling the current five-year plan, creating the preconditions for the next five-year plan, and preparing well our 10th party congress.

What more than ever must now inform the style of our political work is to thoroughly consider all questions, approach their answers politically, improve our ability for relevant Marxist-Leninist analysis which yet is one of principle, and conduct our struggle aggressively. In talking about the pace of the 1980's we have in mind that all truly will adapt themselves to the new conditions and check all previous objectives, tasks and modes of solving them against our higher criteria and elaborate further recommendations for achieving still higher results. The various initiatives, the the new and higher competition commitments by work collectives in all fields of our economy for the implementation of the demanding tasks of the 1980 plan, confirm that our working people have made the 11th Central Committee plenum resolutions their very own. We have combines and enterprises that envisage commodity production growth rates of 8, 10, 12 and more percent. It is a matter of an equally rapidly rising labor productivity, in part more rapidly than the output. It is a matter of achieving our production growth through a relative and partly even absolute reduction of energy and material consumption. All this demonstrates a fighting position that is anchored in a deep trust in our party policy. It makes visible that the ideas of socialism and the strength it emits, and the conviction that our social order is most deeply responsive to man and his genuine interests, more and more inform the thoughts and conduct of the citizens in our republic.

The working methods of the best workers and their approach to solving the tasks assigned must now be spread to all others. When the question is raised what the pace of the 1980's is supposed to be like, the answer comes precisely from the deeds of those who already accomplish achievements that conform to the new and higher criteria. Proceeding from there, tasks must be set down everywhere in such a way that we will not merely carry on with our developmental tendencies thus far but that a qualitative change takes place. That would mean, for instance, that where production growth up to now depended on more energy and raw materials the growth rate from now on must be accomplished by means of equal or reduced energy and raw material volumes, as expressed in the Leuna Combine initiative on energy conservation. It also means that in places where it had been taken for granted that any further production boost had to be ensured through big investments one must now all the more thoroughly consider how through prudent rationalization a still higher performance can be made possible through significantly reduced investments.

We can attack these far-reaching tasks requirements impose on us with confidence. After all, we have all the necessary prerequisites for them all, particularly, the possibilities for fully applying scientific methods to all our production. A great material and intellectual potential has been generated in our republic. Through its quantitative spread it has now reached a point where a transition to a higher economic effectiveness has become possible and necessary. A visible expression of the grown potential for instance is the growth of the volume of basic assets in the production areas of our economy from M 276 billion in 1970 to approximately M 457 billion in 1979. That is a rate of growth of 65 percent. In the industrial field, which produces our economy's largest part of our national income, we now, at M 289 billion, can dispose of 73 percent more in basic funds even than in 1970. Some 38 percent of all equipment in industry is 5 years old at the most. That expresses the progressive stage of our techniques and technology as much as the fact that 47 percent of our industrial equipment is now automated, compared to a 33.4-percent of automation in 1970.

Behind those figures we find an enormous achievement that has strengthened our material-technical base. The main question, however, is what the attitude is that people are taking toward this enormous production potential and how they will use it and handle it with all their abilities, knowledge and skills so that we produce greater results than we did in the past. The question then becomes how the subjective factor reacts to the utilization of the material potential. Organizing that process with maximum efficacy is now one of the main demands placed on our planned economy. It is becoming increasingly more evident that what we are now concerned with is no longer a proportionate development of our material processes as such, but a uniform and harmonious organization of the material and intellectual processes, especially science, the employment of our cadre, the proper requirements for R&D, and ensuring the economic application of R&D data--in short, the organization of comprehensive innovator processes. When the material and intellectual processes are planned and organized in their total context, the people's deliberate actions are directed toward making the available and the additional material potential of the future most efficiently effective. In economic terms that means adding to each unit of embodied labor a highest possible new value.

In the considerable intellectual potential that has been generated as the result of our republic's socialist educational and science policy we possess an extremely important prerequisite for producing a higher end product out of the material resources available to us. The working people now have a high level of training. Today, 79 percent of our working people has received complete training, while in 1955 the figure was only 30 percent. More than 1.3 million university and technical school graduates are employed in our economy today--most of them coming out of the working class. That is 624,000 more than in 1970. In the GDR's R&D facilities, more than 115,000 university and technical school graduates will be at work in 1980, and 78,000 of them in industry (principally in the combines' R&D departments).

The key concern lies in assigning this great intellectual potential in a more and more targeted and effective manner. The 11th plenum therefore has oriented us to directing the creative work of hundreds of thousands of highly educated and experienced scientific-technical cadres in industry, construction, transportation and other areas much more strongly still at qualitative changes in technology, commodity qualities, and production structuring, primarily for the purpose of achieving the highest efficiency. And that in turn is a matter of the political position an individual assumes on strengthening the GDR and socialism.

Combines and the Further Improvement in Planning

At his conference with the kreis first secretaries, Comrade Erich Honecker made the point that management in industry and construction is now almost completely combine-based. A crucial step is thus being taken in 1980 toward better economic management and planning. In terms of its further improvement, the socialist planned economy was placed on a new foundation.

The recently issued regulation on state-owned combines, combine enterprises and state-owned enterprises defines the state-owned combine as the basic economic unit in material production. The combine commands scientific-technical, production and sales capacities. It ensures the close connection between scientific-technical research, project planning and technological production preparation including the requisite construction of means of rationalization, the decisive ancillary supplies and the sales and customer service organizations.

In implementation of the ninth party congress resolution on consolidating and developing the combines the consideration was that this was not a matter of formal changes but the way leading to higher efficiency based on modern management. What was crucial here was the realization that by deliberately and systematically using the Leninist theory on the socialization process great efficiency reserves can be tapped by means of the combine.

That this our party's approach on principle was correct has meanwhile been confirmed by life itself. Otherwise it would not have been possible to schedule the necessary performance improvement through the 1980 plan. Some combines have received extraordinary tasks under the 1980 plan for efficiency improvements and labor productivity boosts. Those growth rates are based on purposefully creating scientific-technical lead times, comprehensive rationalization measures, and targeted steps toward conserving more material and energy, and that makes them realistic. At the same time it cannot be discounted that advances made in the combines are uneven. There are combines that have operated well for years where intensively expanded reproduction constantly reaches a higher level. Others, newly formed only last year, have not yet put into operation all the reserves resulting from the formation of the combine. What matters now is to bring the ones that are still behind in line with the more advanced ones.

What generally matters is to create a closed reproduction process within the entire combine. The solution of that task provides the most important handle for tapping vast efficiency reserves. The "secret" of such well functioning combines like Carl Zeiss Jena, Robotron Dresden, the Herbert Warnke Conversion Technology Combine of Erfurt, the Walter Ulbricht Leuna Works, and the Fritz Heckert Machine-Tool Combine is that their planning and organizing of scientific-technical tasks that must now be implemented already anticipates what must be achieved in terms of the next year and the year thereafter. And not only those international standards that are already well known are taken as a basis but the ones that one must expect also are.

The further improvement of the socialist planned economy now is aimed at creating all the conditions for the combine as a whole to be able to fulfill its tasks in the expanded reproduction at the economic scale. A key problem lies in providing still more conformity between the fundamental economic requirements for performance improvements and a more determined reduction of expenditures and the economic interests of the combines and enterprises.

A complex future assessment of performance improvements by means of the parameters for industrial commodity production, net production, and prime costs per 100 marks in commodity production--combined with other qualitative criteria--will make more apparent to what extent the performance improvement in the combines and enterprises comes through the use of qualitative factors, is based on their own achievements, and conforms with economic interests.

This is by no means merely a matter of planning methods. This involves arrangements that serve the complete utilization of the economic laws of socialism and thus have to do with the interests of the combines and enterprises and the collectives within them and with the interests of all society. If we want to turn the economic laws of socialism still more strongly into the premise on which we operate, the following principle must apply: Whatever is of benefit to the economy must also be of benefit to the combine and enterprise. If they produce more end products by using less raw material, energy and materials, it must still more positively be reflected in their qualitative and quantitative parameters.

The parameter called "net production" has been introduced as something in addition to "industrial commodity production." It entails the combines' and enterprises' own achievements. It reflects the real performance without accounting for the production consumption of material, productive performance and basic assets. This prevents the possibility to reach, or exceed, the plan targets by using too much material or overextending their cooperation. The saving of raw materials, material and energy reduces costs and boosts net production. So the initiatives in reducing production consumption are brought out in this parameter and are taken into account in the performance evaluation. And then there is the other parameter that is being introduced,"prime costs per 100 marks in commodity production." That orients the working people directly to the materials economy and a high refinement degree in production.

At the first glance one can thus see the internal interlinkage and mutual dependency of these three parameters. Clearly and unmistakably, basic economic interconnections are reflected in them. They are therefore, in combination with other qualitative parameters such as improved labor productivity, reduction of prime costs, proportion of products bearing the "Q" quality seal and others, an indispensable foundation for management activity and for conducting socialist competition. This once again makes apparent that to the extent that the shaping of the developed socialist society advances so planning also is being perfected which, after all, is an essential element of this overall social process. Much as we are entitled to say that the socialist planned economy has fully proven itself in the GDR, we yet are aware that from the standpoint of further development new possibilities are inherent in it that have not yet been exhausted. Our socialist planned economy develops dynamically and inexhaustibly along with the demands placed on it. It will meet them better and better, the more shape it is made to assume itself. In terms of strengthening democratic centralism, our party therefore works on its steady improvement for today and for the future. And so the GDR is purposefully approaching its 10th party congress.

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WEST GERMAN COMMENTARY: GDR AGRICULTURAL YIELD PROBLEMS

Duesseldorf WIRTSCHAFTSWOCHE in German Vol 34, No 15, 11 Apr 80 pp 16, 18

[Article: "GDR Agriculture--Late Realization"]

> [Text] The SED Central Committee could no longer keep it a secret. Following 3 decades of growing concentration in agriculture, it has become evident that some socialist agricultural enterprises have grown too large.

The land reform which was ordered by the Soviets immediately following the end of the war caused an immediate increase in the number of enterprises from barely 590,000 to more than 810,000. Their average size shrank from almost 11 to slightly more than 7 hectares of arable land. When the compulsory collectivization was concluded (1960), there were still approximately 20,000 enterprises with an average of 290 hectares of arable land.

But the LPG's [agricultural producer cooperatives] of the 1960's were intended to be only an intermediate stop on the road to socialism. The number of enterprises concerned with crop production dropped to approximately 1,200 as a result of consolidations and, above all, the separation of agricultural from livestock farming. Their average size was around 5,000 hectares, a few agricultural factories came close to the 10,000-hectare limit.

What the SED leadership was celebrating as a "step-by-step transition to industrial production methods" was considered by Western agriculturists as a rather uneconomic concentration. It turned out that they were right.

In March of this year, Politburo member Gerhard Gruenaberg, the Central Committee secretary responsible for GDR agricultural policies, admitted that there were "unjustified tract sizes" and that "planting and harvesting complexes had been created that frequently were unmanageable."

Now the party leadership wants to carefully change its green line. Some of the giant enterprises are to be reduced. More attention is to be paid to the so-called "cooperative democracy."

Even the famous fleet of socialist harvest helpers is supposed to take down its flag without a victory: There will no longer be a central harvest technique regulated by members of the FDJ (the youth organization Free German Youth), because proponents of the East German planned economy found out that it was uneconomical to have whole squadrons of combine operators trample all over the republic.

This late realization was intensified by the fact that the 1979 harvest fell short of expectations; at the same time, however, higher prices on the world market and the U.S. grain policy toward Moscow made it necessary to increase domestic production.

With regard to grain, the average yield per hectare dropped from 38.6 quintals in 1978 to 35.5 quintals in 1979. In the case of sugar beets, it dropped from 292 to 260 quintals. This indicated that the GDR's agriculture produced a harvest which was much too small. The privately operated agriculture in the FRG, which was also adversely affected by the weather, produced per hectare approximately 20 percent more grain and 80 percent more sugar beets.

Finally, General Secretary Erich Honecker lost his temper. In the presence of the first kreis secretaries of his party, he stated in January: "Yield levels in major agricultural areas have been unsatisfactory for years. From the economic standpoint, this is no longer acceptable." He even had this sentence published--but not in the daily press, but in a pamphlet.

Three days after Honecker's reprimand, NEUES DEUTSCHLAND announced: "higher yields--goal of cooperative farmers. Gera crop producers: One additional unit of grain per hectare." One month later, party secretaries and LPG chairmen sent a letter to Honecker with figures indicating the significance of this resolution for sugar beet cultivation: between 20 and 30 quintals more than planned.

Minister for Agriculture Heinz Kuhrig listed the causes which led to the low yields, when meeting in Leipzig-Markkleeberg with 820 funcitonaries of the sugar industry:

-- In more than half of all enterprises there was "not enough evidence" among work collectives of responsibility for soil and harvests."

--Many enterprises are "no longer producing" the required number of plants--80,000 per hectare--something which has been going on for years.

--Crop rotation is not always observed; also, there are problems with fertilizers and the quality of seeds.

To enable the bezirks of Magdeburg, Erfurt and Neubrandenburg to let the land lie fallow at least every 4 years, the bezirks of Rostock, Schwerin, Potsdam, Frankfurt, Cottbus, Leipzig and Karl-Marx-Stadt (formerly Chemnitz) are to expand sugar beet cultivation.

The minister promised substantial aid. The NEUE DEUTSCHE BAUERNZEITUNG, published by the SED Central Committee, reported from Markkleeberg: "Congress participants welcomed the minister's statement informing them that beginning with 1980 more plows, paring plows and disk harrows for the K 700 and the T 150 K will be made available, as well as B 610 tools for seedbed preparation."

Nevertheless, it will take a long time until the desired effect is felt from equipping large enterprises with technical tools and providing them with modern seeds. GDR industrial production is far from adequate. CEMA partners cannot help either, because they are not producing enough to meet their own demands. And no foreign currency is available for imports from the West. Consequently, Honecker issued the patent recipe, "the cultivation of beets should be of concern to the entire population of the village."

Once again, the SED leadership is taking refuge in slogans. Among 60 "Resolutions for 1 May," published in NEUES DEUTSCHLAND on Tuesday last week, there are also two that are intended for agriculture. Resolution No 26: "Cooperative farmers! Guarantee high yields and productivity for the welfare of the people by using available funds effectively!" And resolution No 27: "Workers of socialist industries in agriculture, forestry and food production! Join cooperative farmers to provide plentiful supplies of raw materials to the population and to industry!"

8991
CSO: 2300

GERMAN DEMOCRATIC REPUBLIC

BRIEFS

MEXICAN TRANSPORT MINISTER--Dr Manfred Tietze, deputy GDR minister of electrical engineering and electronics, has been received by Emilio Mujica, Mexican minister of communications and transport in Mexico City. Central to the talks was the further development of scientific-technical cooperation mainly in the field of communications. The GDR is participating in the construction of a radio transmitter center near Mexico City for which it has supplied the blueprints and equipment. [Text] [East Berlin NEUES DEUTSCHLAND in German 15 Apr 80 p 2]

MADAGASCAR GOVERNMENT DELEGATION--A government delegation of the Democratic Republic of Madagascar headed by Justin Rarivoson, minister of economy and commerce, has arrived in Berlin on the first session of the GDR-Democratic Republic of Madagascar Mixed Commission. It has been welcomed by Horst Soelle, minister of foreign trade. [Text] [East Berlin NEUES DEUTSCHLAND in German 15 Apr 80 p 2]

CSO: 2300

STRUCTURE OF CONSUMPTION, IMPACT OF PRICE CHANGES VIEWED

Budapest TARSADAIMI SZEMLE in Hungarian No 3, Mar 80 pp 32-42

[Article by Mrs Ferenc Nyitrai, state secretary, chairman of Central Statistics Office]

[Text] Improvement of the living standards and living conditions of the population has always occupied a highly important place in the policy of the Hungarian Socialist Workers Party. The rate and extent of the improvement in living standards are clearly influenced by existing opportunities, the rate of progress of our national economy and related qualitative factors. We must first create the necessary economic foundations before we can allocate more for consumption and improvement of living standards.

In preparing for the 22d congress, a number of important party documents and responsible statements indicate that, due to the present rather difficult economic situation, the main task of the coming years in the area of living standards and living conditions must be the consolidation of past achievements and accomplishments coupled with the creation of a solid basis for the conditions of future progress. Without exaggeration, we can state that the task is considerable: we have quite a lot to preserve. This is clear both from international comparisons and the analysis of long-range trends in the structure of our consumption.

As early as the beginning and the middle of the 1970's, international comparative studies indicated that the living standards and consumption of the Hungarian population are not only on a level with the general development indicators of the national economy, but are in fact better than our place in terms of productivity levels compared to a number of foreign countries.

A broad comparative survey carried out in 1973 within the UN framework indicated that our situation is relatively favorable in terms of per capita personal consumption: we occupied 8th place in a field of 16 countries with varying levels of development. These countries included a number of advanced capitalist countries, e.g., the United States, Great Britain, Japan; some developing countries, e.g., Malaysia and the Philippines, some

European countries with average or above average levels of development, including Belgium, the Netherlands and Italy. In this period the level of per capita consumption in Italy was 13 percent higher than in our country; even the Japanese level was only 28 percent higher than ours. However, the level of labor productivity in these countries averaged much higher than in ours.

One especially remarkable fact: within total consumption, our per capita food consumption was very high, equaling more than 80 percent of Dutch consumption and almost 70 percent of per capita food consumption in Belgium. The average level of our expenses for clothing was much lower relative to the international field. These data were calculated by eliminating differences in price levels; therefore, they provide a realistic picture.

International experience also shows that the trends and growthrate of personal consumption are greatly dependent upon existing levels. In countries that have already reached medium consumption levels, the annual rate of growth of personal consumption starts to slow down. Between 1955 and 1975 the growth rate of per capita personal consumption of countries with a medium level of development was generally between 4.1 and 4.5 percent. In our country it was 4.5 percent, i.e., at the upper limit of this range.

International data characterize general trends; thus, there may be and, in fact, are, deviations from the norm. They can still be taken as a general yardstock to indicate our place at present and our possible reserves.

The upward trend in real incomes and consumption levels continued in our country during the period of the 5-year plan. The preservation of our present living standards at this internationally favorable level is an important and considerable task. It is useful to survey our present position and our achievements during the last decade in the area of general consumption; the way in which consumption patterns changed; the way in which they can be influenced by price measures; what are our tasks and reserves for the coming Sixth Five-Year Plan.

Structure of Consumer Goods

In the almost 2 decades that have passed since 1960 there have been some fundamental changes in the structure of consumption by the Hungarian population; at the same time, per capita consumption doubled (at comparable prices).

As a result of the accelerated economic growth characterizing the second half of the 1960's the volume of per capita consumption grew by an average annual rate exceeding 5 percent. This growth was accompanied by an important structural transformation. There was a massive increase in purchases of consumer durables, not just in the cities but also in villages. Supplies of household appliances expanded rapidly. In addition to refrigerators, washing machines, vacuum cleaners and oil heaters serving the quality of household equipment, we saw the rapid spreading of television sets, saturation of radio ownership, the appearance of second and third sets in the form of portable and pocket radios, reel-to-reel and cassette tape recorders and stereo record players.

Widespread use of the automobile started in the second half of the 1960's and accelerated in the 1970's. In 1960 there were 4 automobiles bought for every 10,000 persons; in 1975 and in the following years there were 65 to 75 automobile purchases per 10,000. During the second half of the 1970's there were 62 to 75 automobiles and 68 motorcycles or smaller mopeds per 1,000; television ownership was over 240 sets per 1,000 persons.

The modernization of consumption patterns had an important effect on the living conditions of the population. Many families possess their own means of transportation; this no longer counts as a luxury but rather as a factor influencing the way of life of the family. On the one hand, substantial numbers of families continue to save for the purchase of their first car or, later, for the resources needed to maintain and operate their car and, in time, to trade it in for another model. But the automobile means more than a vehicle for saving: it also provides an opportunity for a substantial increase in tourism. Without a doubt, this has in fact occurred during the past decade.

The other factor, at least as important, is that about one-third of the population got a new or better apartment since the mid 1960's (here we include the renovation and expansion of apartments as well as the addition of new amenities). The number and proportion of shared rentals decreased substantially in a decade and a half. In terms of the growth in the number of apartments per 1,000 of population our position is favorable by international comparison: the growth between 1967 and 1977 puts us in 10th place among 16 European countries.

The demand for clothing articles also increased in the last 15 to 20 years. This was caused in part by the higher income levels of the population and in part by our increased sensitivity to changes in fashions, compared to past decades. The greater degree of openness led to the relatively rapid spreading of new fashion trends; state and cooperative industry could keep pace only with some delay. The increased availability of synthetic materials encouraged the population to change to products made of new, easy to handle, synthetic materials. Clearly there has been a substantial improvement in the supply of such products during the 1970's.

Household appliances spread rapidly. This was encouraged by cheap electrical energy: when buying new, more complicated automatic appliances, customers were not interested in power consumption since this had only a meager effect on the family budget.

The second effect of the electrification of households was a rapid increase in household energy demand coupled with the transformation of the pattern of energy use. In addition, for decades we lagged behind in the area of energy-structure modification and households were given considerable advantages in the interest of transformation. Unfortunately, this was timed to coincide with the price explosion in the world market. Part of the population switched to oil heating just at the time when oil became harder to get and, even more important, more expensive in the world market. The general population consumes especially large amounts of electrical energy: almost 18 percent of the electrical-energy consumption of the national economy goes to household use. Thus, it is important whether it is used rationally or wasted.

Since the middle of the 1960's there has been a substantial transformation of the food consumption of the population, consumption increased greatly. Vegetable and fruit consumption developed favorably. For example, per capita milk consumption grew from an average of 110 kg in 1970 to 153 kg in 1978. In 1978, per capita vegetable consumption was over 80 kg; fruit consumption was over 70 kg. In spite of this, consumption patterns are still not up to modern, biologically justified requirements.

Per capita consumption of luxury articles continues to be high. Consumption of alcoholic beverages, particularly distilled liquors, continues to grow every year. This was only slightly changed by the latest measures and the changes were only temporary. In 1978, per capita distilled liquor consumption was 9.2 liters, which is essentially identical to 1977 levels but much higher than in 1970 (5.4 liters). Beer consumption continued on the increase: in 1978, per capita levels were at 86 liters. In recent years, there has been a slight increase in tea consumption; however, coffee consumption of Hungarian households is much more important. Tobacco consumption is not on the decline: since 1970 it has averaged 2.3 kilograms per capita annually.

Services must be discussed separately. Widespread use of consumer durables led to a substantial increase of the demand for repair and maintenance of such products. Accordingly, the structure of the service sector has undergone a substantial transformation. Traditional repair and customized services are declining, e.g., shoe and clothing repair. There has been a slow increase in laundering, dyeing and drycleaning but their relative weight within the service sector declined.

There are still many deficiencies in the area of services. Improvisation by amateur repairmen has been playing an increasing role in fashionable trades, especially in areas where state and cooperative industry have insufficient capacity to meet existing demand. This is especially noticeable in construction industry repair and maintenance, repair of small household appliances and electrical machinery and, last but not least, in automobile repair. This situation was improved by the measure which enabled skilled pensioners and active workers to engage in service activities after working hours, provided, of course, that they have the necessary permits.

The combined effects of these factors were primarily improving the services available to the inhabitants of the capital. In 1978, the per capita output value of consumer services was 2,058 forints in Budapest and only 1,110 forints in the provinces. The difference arose not from a similar disparity in demand but from the continuing deficiencies of services in the provinces.

Construction industry services, apartment repair and maintenance represent a separate category of consumer services. At comparable prices, there has been an average yearly increase of 10 percent in the output value of such services during recent years. The demand for apartment remodeling work is on the increase. Small artisans performed 82 percent of these services in 1978. The rapid increase in demand is shown by the fact that in 1978 the population spent more than 3 billion forints on the repair and maintenance of residential units. This is 18 percent above the preceding year and 68 percent above 1975 levels (calculated at comparable content).

The pattern of consumption emerging by the end of the 1970's reflects, in many ways, living conditions arising from higher living standards. One can also observe an increase in home entertainment (i.e., listening to radio, watching television, listening to taperecorders or gramophones); book reading is not making sufficient progress, however. Cinema and theater attendance continues to be high by international standards; this is probably due, in part, to their relatively low ticket prices.

Consumption by Social Strata

In analyzing the level and structure of consumption we must also discuss differences among social classes and strata. The party program platform is unequivocal in stating the social need for insuring that the living conditions of the inhabitants of cities and villages converge more closely, and that differences between manual and nonmanual workers decline. The state is providing many opportunities to achieve this. An analysis of the composition of consumption reflects the extent to which differences in apartment construction and amenities have declined; we can also see other signs pointing in this direction.

One of the great achievements of our social policies is the substantial convergence of the living standards of various social strata and geographical regions; many aspects of living conditions have changed accordingly. The construction of new village apartments on a mass scale and automobile purchases by workers in the provinces has created new demands in keeping with higher living standards. Young people find these demands quite natural. I wish to emphasize that we still have a great deal to accomplish in the area of encouraging and satisfying cultural demands arising in conjunction with higher living standards; but we must realize the decisive importance of the fact that the material resources needed to accomplish this are mostly at hand.

The dominant differences in the area of living standards and, especially, consumption, are of another character. There is a substantial gap in the level and habits of consumption between active wage earners and pensioners. Pensioners spend much less on clothing and a relatively high percentage of their income is spent on food. The percentage of their spending on luxury goods is almost the same as that of active workers, especially manual workers and cooperative peasants. Pensioner households, especially those who live apart from their children and grandchildren, spend less on new household equipment or the purchases of big-ticket consumer durables; the combined value of this category represents only 4 percent of the total consumption of old age pensioners. Residential construction and real estate purchases account for only 6 percent of spending by pensioners.

There are differences in the consumption patterns of white-collar families, members of the working class or cooperative peasantry and those with dual incomes. Food accounts for 28 percent of spending by white-collar workers (luxuries account for 7.4 percent). In the case of manual workers, cooperative peasants and those with dual income spending on food represents about one-third of total spending.

There are hardly any differences in spending on clothing. Workers with dual incomes spend a relatively large amount (13.9 percent of total spending) on clothing. In cooperative peasant and white-collar households this category accounts for 11.7 and 12.1 percent of total spending, respectively. Spending on residential construction and real estate purchases is especially important in the case of cooperative peasantry and persons with dual income: in both cases it exceeds 12 percent of total spending. This is because young people in the provinces, and especially the villages, can get an apartment only by building it themselves, possibly with the help of the cooperative. The solution is easier because in these cases the financial resources are more easily available. A rather large percentage of spending by white-collar employees goes for services: almost 19 percent. In the case of cooperative peasantry the share of spending on services is only 8.1 percent. In the case of the working class it is below 12 percent.

There are substantial differences between active wage earners and pensioners with regard to housing conditions and ownership of consumer durables. On the whole, there are fewer people living in the apartments of pensioners: there are many pensioners living in relatively large apartments, alone or with their spouses. There are only 106 people for 100 rooms in inactive (mostly old-age pensioner) households. Most of them live in the cities. More than 96 percent of pensioner apartments have electricity; 66 percent have gas and 36.4 percent have bathrooms. These apartments represent a reserve for further development projects and housing for young families; of course, only after modernization. Another intensive means of housing policy might be to provide more suitable incentives for old people to move out of apartments which are too large for their needs.

Differences with regard to housing amenities and density of occupants are smaller and decreasing if we compare workers and cooperative peasants, but larger if we compare the former with white-collar families. Working-class families have 176 occupants per 100 rooms; for cooperative peasantry, the index is 170 occupants and for white-collar households, 138 occupants. More than 85 percent of white-collar households have bathrooms; for blue-collar workers the percentage is 58 percent and for cooperative peasants, not quite 40 percent. Almost every household has electricity, and gas is available in about 32 to 38 percent of all households.

Similar differences exist with regard to ownership of consumer durables. At the end of 1978 there were 86 refrigerators per 100 worker or dual-income households; the index was 98 for white-collar households, 76 for cooperative peasants and 63 for pensioners. The differences are less pronounced in the ownership of washing machines and almost nonexistent in television ownership, except for pensioners, who have 72 television sets per 100 households.

The average level and pattern of consumption by the Hungarian population, especially the consumption patterns of active wage earners, provide a good illustration of the enormous progress in improving living standards and living conditions during the past few decades.

Price Levels and Consumption: Price Sensitivity of Consumption

In analyzing the level and structural transformation of consumption during the past few decades we must not lose sight of the fact that up until the end of the 1970's prices of consumer goods were kept purposely low in order to insure that all population strata could obtain them with relative ease. Under conditions of accelerating world market-price rises this could only be done by state subsidies which were quite substantial in many cases. Nevertheless, there were some small-scale price changes even in those decades. Thus, the experience of earlier years provides a basis for investigating the extent to which consumption is affected by price changes and increases for various products and product groups.

Experience of the first half of the 1970's shows that food price increases provided only a temporary brake on the rate of growth of consumption and reduced consumption only for a short period. The 1976 meat price increase led to a temporary slowdown of meat consumption. After 6 months, household budgets adapted to the new price levels and the growth rate of meat consumption accelerated once again. A similar temporary decline in consumption followed the milk and milk-product price increases, but after about a year the consumption of milk and milk products continued to increase. The situation is similar with regard to luxury goods. This is shown by the periodic adjustment of coffee prices in accordance with the world market price, or the increased prices of certain alcoholic beverages.

Earlier studies indicated that rising living standards lead to increasing demand for more expensive, higher-quality products within each product category. For example, increased incomes led to a substantial growth of demand for ham and salami products, although the demand for cheaper meat products also continued. Problems arise when production is keeping pace with the demand for quality products while the selection of cheaper goods is declining. This has happened, for example, when more expensive breads became available but ordinary whole wheat bread disappeared from food stores.

Thus, the experience of the late 1960's and early 1970's shows that higher prices for food and luxury goods ahd no appreciable effect on the structure of consumption. Price increases were relatively modest during this period: in each case, they were concentrated on a few products. Since living standards were improving rapidly, purchases of more expensive products also continued to increase. For example, there was an appareciable change in the quality composition of tobacco products. The share of foreign-made filter cigarettes (which were more expensive) kept increasing. In the area of durable consumer goods the effect of price changes is different because products are replaced at a faster rate and also because the performance and appearance of the new product are usually better; at the same time, they are more expensive. In these cases, however, the consumer does not always buy a more expensive product because he wants to watch more television channels, let us say; he may buy it because stores have a wider selection of expensive high-performance sets than cheap, low-performance sets which could also fulfill his needs. For some consumer goods the overriding consideration is undoubtedly to lighten household chores. For example, the appearance of semiautomatic and fully automatic washing machines affected the structure of consumer demand; in fact, in this particular area demand rose more rapidly than domestic buying opportunities.

Improving living conditions also lead to new demands related to useful and sophisticated forms of leisure: some of these deserve our attention.

The number of yards, vacation homes and plots grew enormously since the beginning of the 1970's. At the same time, demand for tools, implements and small machines needed for yardwork also increased. Availability of such products was improved, primarily by imports. Every year we imported more and more expensive products but we were unable to fully satisfy demand.

The situation is analogous with regard to a number of modern telecommunications products: I have in mind primarily stereo receivers, recordplayers and taperecorders. Here, the price will not determine whether the consumer is going to buy the product; the determining factor is whether we make or import such products for domestic consumption. This is because by now we have a group of consumers who will buy such products regardless of the expense involved.

The experience of other countries also indicates that consumption of various product groups reacts differently to price changes. These experiences, however, are not always identical to ours. For example, some Dutch research* indicates that consumption of clothing and textiles between 1948 and 1962 reflected rather closely the changes in prices: their consumption increased with significant fluctuations. During the same period, and especially between 1953 and 1962, purchases of consumer durables increased, despite rising prices, with almost no fluctuations or downturns. Similarly, tobacco consumption increased slowly but steadily in spite of rising prices. All of this much like our own experience. The difference is that in our country consumption of meat, meat products and alcoholic beverages was dampened significantly by the price increases. Per capita consumption of these products increased only slightly in 15 years; in fact, per capita consumption actually declined for a number of years.

We can analyze the effects of domestic price trends on consumption after the price changes in the first half of 1978 and 1979 but before the substantial consumer price changes of 23 July 1979.

The following price increases occurred in January 1978: coffee up an average of 50 percent, confectionery products up 25 percent, tropical fruits up 8 percent, bicycles up 12 to 15 percent; the price of many machine industry products and articles containing confectionery products also went up. Distilled liquors became considerably more expensive in the middle of 1978. The consumer price index went up by 2.6 percent as a result of price increases by central authorities during 1978; this percentage was also affected by increases in taxi fares and entrance fees to swimming pools and public baths which occurred in 1977. There were additional increases in the price of a number of free price products (e.g., vegetables and fruits).

These price increases had essentially the same effect on all social classes and strata: between 4.5 and 4.7 percent. The rise in coffee prices temporarily reduced consumption by about 10 percent (in 1976 and 1977 average annual per capita coffee consumption was 2.9 kg; after the 1978 price rise it declined to 2.6 kg); however, 1979 brought another increase in consumption. But the composition of coffee consumption was altered: less was consumed in espressos and restaurants, more coffee was made at home or at the workplace, where it was much cheaper. There has been no significant increase in the consumption of confectionery products during the past few years. This was caused not so much by price increases as by complaints regarding quality and deficiencies in selection. (In 1979, when the scale of confectionery products expanded significantly, consumption returned to its prior level.) The rise in the price of tropical fruits did not discourage consumption. Higher prices for metal and hardware goods and machine industry products had almost no effect on consumption. Higher prices for distilled liquors reduced consumption somewhat (however, we must realize

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* J.A.H. Maks: "Stability and Consumer Behavior in Holland, 1926-1962," European Economic Review, 1978 No 11 pp 343-362

realize that liquors distilled in villages, in private homes, without permits, probably compensated for this small decline). The taxi fare increases did not reduce the use of taxis; swimming pools were overcrowded during the summer despite higher entrance fees.

In conclusion, we can state that the population adjusted rapidly to the 1978 price increases; only in coffee consumption was there a significant, albeit temporary, impact.

Consumer price levels increased by an average rate of 5.3 percent during the first half of 1979. This was the result of the following factors: at the beginning of January, gasoline went up by 25 percent, tobacco products an average of 30 percent, beer 20 percent and rice 50 percent. At the same time there was a substantial increase in the price of some construction materials, between 20 and 40 percent; some hardware prices went up once again, including some washing machines and gas ranges. Beginning with 1 February newspapers and periodicals cost on the average, 40 percent more; on 11 June gasoline was increased another 20 percent.

The effect of these price rises on different social strata varied. The price index was highest for cooperative peasants and those with dual incomes: 106 percent in the first half of 1979 compared to the first half of 1978. The increase was 5.5 percent for the working class; 4.8 percent for white-collar families and 4.7 percent for pensioners. There were only a few cases where this significant rise in prices had an impact on consumption patterns. For example, the rise in gasoline prices temporarily reduced gasoline consumption. The increase in the price of tobacco products and beer had almost no effect on consumption. Demand for building materials kept increasing in spite of the rise in prices. The population got used to the higher price of newspapers and periodicals after a few months: there was no noticeable decline in sales of popular papers. This was in part due to improved print quality of weekly magazines.

The price changes of 23 July 1979 affected a much wider range of goods. According to preliminary data, the impact of higher prices was essentially the same for working class and cooperative peasant households, averaging about 9 percent on an annual basis. The price increases concentrated mainly on food, including basic foodstuffs, and on household energy. This has a greater impact on wage earners, salaried employees and pensioners than on the peasantry since the latter produces a substantial percentage of its own food consumption, although the proportion of purchased foods is increasing among cooperative peasants and the mechanization of their households represents substantial energy requirements. In July 1979, simultaneously with the price measures, there was a substantial decline in vegetable and fruit prices relative to the preceding year; this caused a welcome shift in consumption toward higher consumption of biologically useful vegetables and fruits.

The population reacted to the 23 July 1979 price measures in a mature manner, as before. The preparatory political work related to this question and the openness with which the leadership discusses the reasons and the background behind our economic problems resulted in a change of our public attitudes. The following words of Comrade Kadar regarding the price increase of 1979 are very much to the point: "The great strength of our socialist society is revealed by the kind of behavior, the impressive discipline, with which our public opinion and, in particular, our party membership received the price increase. The trust in our policy was also demonstrated when people understood that the measure was necessary."*

The price measures and the augmentation of incomes to compensate for their effects had a different impact on various social strata. It is well known that most of the adult population received an income supplement of 180 forints; for cooperative peasantry the supplement was 140 forints and for children, 130 forints. A new element is that single-child families also received this supplement. The price increase represents, in terms of average per capita expenses, an extra 1,813 forints as a result of increased prices for food, heating and household energy and a further 813 forints for other items; together, it adds up to 2,626 forints.

The income supplement represents an average of 1,860 forints per year per head (taking into account the composition of various categories); thus, it will cover, on the average, about two-thirds of the extra expenses. But the situation is different for each social group.

For pensioners, the annual impact of the price increase is 2,239 forints (based on the consumption patterns of such households). Since these households generally have no dependent children, the income supplement will be 2,089 forints per annum. Thus, the income supplement will compensate for almost the entire price increase in the case of pensioner households. We must point out that pensioners are far from being a homogeneous group today, since some of them have high pensions and others, especially those between 70 and 80, and above, have relatively low ones. In the case of the latter, the income supplement not only compensated for increased expenses, but in fact exceeded them. Thus, in the case of those with the lowest pensions, and generally in households where per capita average income is relatively low, the impact of the price increase was fully canceled out by the income supplement measures. The situation is similar in the case of active wage earners. The July price increases had almost no effect on worker or white-collar households where average annual per capita incomes were in the 12,000 to 14,000 forint range.

The difference between the impact of the price increase and the amount covered by income supplements is greatest in white-collar households where the volume of the consumption of food, energy and other goods is higher. According to calculations, the annual per capita impact of the price increase is about 3,300 to 3,400 forints; of this, 1,936 forints are covered by the extra income from the supplementary payments. The proportion is better in the case of workers, cooperative peasants and those with higher dual incomes.

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* Speech by Janos Kadar at the Budapest Party Active Conference, TARSADALMI SZEMLE, No 10, 1979, p 11

The effects of the price increases in July 1979 can be analyzed in a realistic way only after a more extensive period (at least 1 year). This is because the extent of the price increases varied from product to product and all of their effects did not appear all at the same time. In the case of perishable goods consumed on a daily basis, the price increase had an impact on expenses immediately after 23 July; however, in the case of foods that can be stored for longer periods, i.e., flour, sugar, rice and noodle products, there was a significant amount of stockbuilding before the price rise. As a result, consumption of these goods was below usual levels between August and October. Prior to the price increase there was a sudden jump in purchases of furniture and building materials. Requirements planned for the entire year were satisfied earlier; in fact, sales were even higher than that. The situation was similar in June and at the end of the year, especially in November when, in addition to normal Christmas shopping, there were higher sales of durable consumer goods, e.g., television sets, automatic washing machines and high priced electrical goods. Thus, consumption by the general population continued in the second half of 1979 to react to transitional phenomena, rumored or expected events; these consumption data are not yet representative of long-range trends.

Nevertheless, there are already some indications pointing to the direction of expected shifts in consumption patterns, if not their extent.

Based on a representative study of worker, white-collar and pensioner families of similar composition living in Budapest, data on personal consumption during the second half of 1978 and 1979 indicate that there has been some decline in per capita meat consumption. In terms of average monthly consumption the decline relative to the monthly average of the preceding year was only 3 percent between August and November, 1979. More importantly, there has been a significant and desirable shift in the structure of meat consumption. Compared to the similar period last year, there was an 11-percent increase in per capita poultry consumption, while at the same time consumption of pork, beef and other raw meat declined 6 percent. Consumption of meat products declined even more, 9 percent; they were probably replaced largely by eggs: in the second half of the year (without including December data) per capita consumption of eggs was up 8 percent from the preceding year. Unfortunately, consumption of fat continued to increase, by 6 percent on a per capita basis. Thus, we are using more fat than needed for a healthy way of life. Although the price of butter remained unchanged, still not enough is being sold. Cooking oil and margarine consumption increased only very slightly.

There has been a remarkable decline in eating out by families following the price increase. Fewer people went to restaurants because their prices increased much more sharply: this was changed little by the price reduction introduced since then in second-class restaurants. In this area the most remarkable factor is the slowness with which restaurants, crowded for decades, are getting used to the process of adjusting to customer demands by increasing their selection, expanding their range of less expensive dishes and improving service. (There are some good examples here but this attitude is not sufficiently widespread.)

The quantity and value of consumption continued to increase in the area of goods and services not affected by the price changes of July 1979. Per capita alcohol, coffee and tobacco consumption by observed households in Budapest increased at a combined rate of more than 13 percent; spending on services went up an average 17 percent. No significant reductions were noticeable in electricity and heating-fuel consumption by households since the higher bills were due for the first time at the end of the year.

Although it is not possible to arrive at definite conclusions on the basis of such scant data, it is already clear that the best way to push consumption patterns in a more up-to-date direction is not by modifying the prices of entire product groups but by shaping the prices of substitute products in a proper manner. Several years of experience are needed in order to be able to arrive at a thorough analysis of the effects of price changes on various social strata. It is also important to note that, starting from this year, consumer prices will be modified in a more flexible manner to follow changes in producer prices. We need to get used to these by learning to be flexible in changing our consumption patterns; this requires time. Thus, price changes and the trends in patterns of consumption will continue to play a central role in the coming years.

In my opinion, price changes are only one factor, and by far not the most important one, in inducing changes in consumption patterns. Satisfying more exacting demands and the highly varied demands of various groups of consumers requires a highly varied selection of goods combined with marketing and services much more closely attuned to the wishes of consumers. We have many reserves in this area; some of them can be utilized without any investment of resources. When prices are higher, consumers are more sensitive about quality; this is likely to have a favorable effect on domestic production in the coming years. Quality more in tune with demand, selection and thoughtful service to customers are all important elements in improving living conditions for all of us while preserving living standards.

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LONG-RANGE DEVELOPMENT OF TRANSPORT FACILITIES DISCUSSED

Budapest KOZLEKEDES TUDOMANYI SZEMLE in Hungarian No 1, Jan 80 pp 1-4

[Article by Lajos Urban, state secretary, Ministry of Transportation and Postal Affairs: "Long-Range Development Questions of Hungarian Transportation"*]

[Text] Taking care of the tasks deriving from socioeconomic growth and meeting the new requirements, resolving the tensions and contradictions which have developed, has made it necessary for our transportation management to adjust its present economic policy to the changed circumstances. The foremost requirement before us today is to develop better coordination between the national economy and transportation, to organize transportation at the national economy's level. Transportation must be made fully suitable to perform the tasks which represent the entire society's interests, so that it may effectively serve the development of our country's economy.

Taking into consideration our socioeconomic growth and our expanding international links, we are expecting about a 70-percent increase by 1990 in the transportation of people and freight. We wish to fulfill the passenger and freight transport requirements by means of better organized cooperation of the available capacities, further improvements in transportation work and by increased coordination between the production processes and transport.

We define the job spheres of the transportation branches, the distribution of work among themselves, as follows:

--The railroad's job is domestic and international transportation of passengers and freight in large volumes and over long distances. In addition to this it must also handle a significant portion of the traffic in the commuting areas surrounding Budapest and the major cities.

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*The author's lecture at the international transportation policy conference organized by the Transportation Science Association, in Budapest on 27 and 28 September 1979.

--The task of public highway transport enterprises, the main activity of which is transportation, is the systematic and large-volume transportation of passengers and freight over short and medium distances, and international transportation of special merchandise requiring rapid forwarding.

--The state enterprises and cooperatives, of which transportation is not the main activity, perform with their trucks transportation directly linked to the production and distribution processes which in general are not large in volume and not on a scheduled basis. The buses of these organs--besides transporting the workers--can also expeditiously fulfill the cultural and social travel needs of the enterprise's employees.

--In the capital city, the bulk of the traffic is handled by the metro, the rapid-transit railway, buses and electric streetcars. Environmental protection and more efficient utilization of energy place emphasis on the development of trolley bus transportation. Mass transport in our cities is built mainly on buses.

--The role of passenger automobiles is increasing in getting to the place of work. However, basically it must serve those needs for which the means of mass transportation are less suitable due to their restricted nature.

--Shipping on the seas must satisfy the transportation needs of Hungarian foreign trade to an increasing extent. The job of shipping on rivers is large-volume and economical freight transportation of goods which do not require rapid forwarding. [The role of] passenger-ship traffic is to handle pleasure trips and foreign tourism on Lake Balaton and on the rivers.

--The role of air transportation is increasing in long-distance international passenger transportation and in the transportation of goods which require rapid forwarding.

--The purpose of transportation in pipelines is to move large volumes of gas, petroleum and their derivatives.

According to our prognostic calculations, passenger transportation will increase more slowly than before. Travel needs will become differentiated, their distribution in terms of time and region will change. The degree of urban mass transportation's development will equalize between the large and small cities.

Business travel is expected to increase hardly at all, but personal travel, especially tourist and foreign tourist in character will expand significantly.

The railroad's share is expected to continue to decrease in mass transportation, long-distance bus transportation will increase more moderately; in the capital city the mass transportation needs will not change significantly, but in our other cities will continue to grow dynamically for a while.

With a continued increase of the population's passenger-car inventory, the share of personal transportation in traffic will increase.

The rise in the standard of living and changes in lifestyles increase the demand for creating cultured transportation. The joint role of mass and personal transportation increases in fulfilling these. Rational distribution of work must be subordinated to developing and operating a personal transportation system which is favorable from the traffic viewpoint. Mass transport--besides emphasis on its development--must continue to be improved with traffic organization measures. The rate at which the population's passenger-car inventory increases is determined jointly by the national economy's load-bearing ability, by standard of living policy, foreign trade, financial and other viewpoints. Taking international experience also into consideration, it is a basic task to prevent overcrowding of unbearable proportions from developing, particularly in the area of large cities.

In the capital city's passenger transport, the role of mass transportation must be increased by extending the metro and the rapid transit railway networks and by improving surface transportation. Together with building new residential complexes, care must be taken to develop and build up the transportation network. Measures are necessary to make passenger-car traffic avoid the city's busiest points. Conditions must be provided at the terminal points of suburban and urban mass transportation to permit taking advantage of the mass transportation means for trips into the city's center.

In addition to Budapest, mass transportation in the selected major cities must also be developed at an accelerated rate. In the interest of smooth handling of urban traffic, better harmony must be created between the development of residential areas and of transportation and connections between urban and suburban transportation must be improved.

Modernization of the production structure also affects the transportation of goods: it modifies the growth rate of shipping, at the same time the expansion of production cooperation and specialization make the whole process of shipping more complicated. Besides the results already achieved, the distribution of work will change at a slower rate, the railroad's share will decrease, and the share of transportation on public highways, in pipelines and on the waterways will continue to increase.

Planning and coordination of the modern freight transportation processes at the national economy's level and opening up reserves are basic conditions for fulfilling the tasks of transportation. The development resources needed for this must be planned at the overall national economy's level, within the framework of the program which includes all the conditions of the modern means of transportation.

The goal is to increase society's efficiency, eliminate heavy physical work and accelerate the transportation processes. Since production and consumption occur separately from each other in terms of time and space, the differences are bridged over by warehousing and shipping.

The relationship between the producing and shipping processes is becoming closer and closer, changes, interventions in one or the other directly affect the operation and results of the connecting area. Thus today shipping and loading and production and distribution can no longer studied separately, because these must be operated in coordination within one system, as connected elements of a single process.

Smooth hauling of merchandise can be insured by more uniform shipping and loading, with the development of techniques and technology, by better utilization of the capacities. Shipments should be suitable for mechanical loading, modern (containerized, palletized, etc.) forwarding which is to be made popular in broad circles. Loading must be mechanized at the connecting points between railroad, public highway and waterway transportation, and at the regional centers, insuring organized inbound and outbound freight movement. Such relationships must be built up between the shippers and the haulers which are based on common interests. In the interest of developing efficient shipping processes it is justified to expand freight-forwarding activity.

The volume of freight shipping within cities must be decreased also by the proper locating of wholesale warehouses, removing them from city centers. Commercial shipping of goods must for the most part be done at night with the use of containers and loading pallets.

It is necessary to increase utilization of the capacities of the trucks of the various industrial, construction industrial and agricultural operations by organizational and organizing means. Our goal is that primarily the demand for live work should decrease. Hauling for pay by the vehicles of these enterprises and producer cooperatives must also be supported.

The abilities of shippers to receive and load merchandise must be increased by economic incentives, organizational and--in justified cases--governmental measures. Expansion of shipping before deadlines and increasing weekly loading schedules play important roles in making the shipping of goods smoother.

It is very important to our economy to take appropriate advantage of our country's transportation geographic location. According to the prognoses, during the next decade export, import and transit traffic will increase more than two and a half times. Modernization of the railroad network, construction of highways and superhighways, improvement of the airport, as well as development of the European waterway system make it possible for us to increase our participation in international traffic by such an extent.

The basic task of international freight shipping is to satisfy the demands of the traffic generated by foreign trade and by production cooperation projects. Depending on the freight market's opportunities and on the economy of producing foreign currency, international merchandise hauling on public highways, air transportation and shipping on the seas must be expanded. Our foreign trade must make better use of the domestic means of hauling than it has in the past.

The main lanes of international traffic and the capacities of border stations must be increased in such a way according to the traffic and in coordination with the affected countries that these should reliably fulfill their roles in the European transportation system.

To protect our highway network, for the purpose of preventing overloading of the roads, on the basis of the principle of mutuality, the regulation of transient freight truck traffic must be strengthened.

Taking into consideration the tendencies of the growth of foreign tourism, we must be prepared for 15 to 20 million foreigners visiting our country each year. This makes it necessary to improve the conditions of international passenger transportation and traffic and to expand the sphere of related services.

An important goal is to further broaden and strengthen our links with the international transportation and freight organizations, and to improve our links with neighboring countries. The results we have already achieved in this area provide a secure foundation for achieving the long-range goals we have set for ourselves in our international relationships.

Taking the possibilities within the national economy into consideration, our transportation management takes particular care to develop the technical aspects of urban and long-distance passenger transportation, as well as freight transportation in coordination with production and distribution.

In those areas where during the last decade development fell short of the needs (reconstruction of trackage, safety equipment, railroad junctions and switching yards, track electrification, expansion of border stations, construction of public highways, particularly of urban overpasses and bypasses and of bridges, and the modernization of these), our goal is that progress should be faster. We wish to accomplish this in such a way that, if possible new, severe tensions should not develop in other areas of transportation.

The available financial resources must be distributed in such a way that the branches of the unified transportation system should develop in a coordinated manner. Depending on the national economy's abilities, transportation's share of the budget should increase in harmony with its needs in such a way that the sums which can be spent on development should cover development of the means which actually provide the performance. A significant portion of transportation investments must be implemented while operation is maintained. The capacity of a large portion of the facilities must be sized in such a way—even agreeing to the additional costs—that for decades these should be able to handle the increasing tasks. Creating the conditions for personal transportation which continues to grow rapidly, enforcing the quality and safety requirements, as well as meeting the environmental protection requirements whose significance is getting to be larger and larger, represent increasing burdens.

In railway transportation, axle loading of over 20 tons must be insured on more than 80 percent of the network by accelerating the rate of track modernization. The approximately 3,000 kilometers of main network must be made suitable for safe travel by trains at speeds of 100 to 120 km/h, and within this certain international lines for speeds of 140 to 160 km/h, in coordination with neighboring countries. Steam pullage must be eliminated within a short time at the railroads. It is expeditious to strive for a ratio of 65 to 35 percent in electric and diesel pullage, respectively. In accordance with this, the 1,200 kilometers of electrified railroad network must be expanded by an additional 1,200 to 1,500 kilometers. On 500 kilometers the construction of new connecting, bypass or second tracks is justified.

Reconstruction and development of junction stations, switching yards and border-crossing stations of definitive significance from the viewpoint of railway transportation is a task with special importance to be implemented at such rates which will gradually—within a relatively short time—catch up the distance we lag behind schedule. Besides creating the conditions for modern railroad operation, construction of facilities which serve the convenience and safety of the passengers (elevated platforms, underpasses, etc.) must be insured, as must the appropriate connection of these with local transportation. Loading must be fully automated at junction stations and district railroad stations.

This activity must be vigorously stepped up especially at junction stations of railways with differing gages.

The freight-truck park of the public highways must be increased to such an extent, conforming to the freight tasks, that repeat overhauls requiring excessive live labor and spare parts utilization should not occur. The purchasing of special-purpose trucks and semitrailers should increase while endeavoring to decrease the number of types. Bus types more suitable to transport agricultural and other workers, and less expensive ones, must be developed.

Modernization of the vehicle park of urban [illegible] transit must continue in the present directions and at present rates [illegible] expeditious to improve trolley bus transportation which is advantageous from the environmental-protection viewpoint.

In the nationwide public highway network primarily the junction points, bridges, urban pass-through and bypass sections must be developed, and new connecting roads must be built. Structural transformation of the network, creation of the spoke-and-ring primary network system must be gradually implemented, taking into consideration the development of residential areas and of transportation. The needs justify acceleration of the construction of high-speed highways and superhighways, widening and strengthening of road surfaces, increasing the length of roads which accommodate 10 tons of axle loading. The superhighway belt around the outskirts of the capital city must be gradually built up.

Developing the road network under the management of the councils and of the cities, preference must be given to roads which are important from the viewpoint of mass transportation. It will be necessary to gradually build multilevel interchanges in Budapest and in the cities on roads with much traffic. Construction of roads within city limits and of agricultural roads must continue at a faster rate.

In harmony with developing the public highway network, it will be necessary to build several large bridges and multilevel road-railroad crossings, and to provide safety equipment for grade crossings.

In Budapest, it is justified to continue construction of the metro network at the present rate. Care must be taken to continue building up the system of local, regional and long-distance mass transportation and its connections with the metro, upgrading the suburban rail lines into rapid-transit railways. It would be expeditious to begin construction on the rapid-transit electric streetcar network, continue modernization of the remaining electric-streetcar lines and rational expansion of the trolley bus network. There is a need to rapidly increase the capacities of crossings over the Danube and to build parking facilities.

In waterway transportation, tug and self-propelled shipping must be developed and shipping by the barge system must be commenced. Reconstruction of passenger shipping must be completed. The seagoing ship park must be improved with consideration given to the opportunities of earning foreign currency. In harmony with the development of the domestic and European waterway network, it will be necessary to improve harbors, loading docks and passenger ship terminals.

In public air transportation, the basic goal is to expand the Ferihegy airport and to modernize the air-traffic control system. Air transportation must be further developed with modern, long-range airplanes.

It is expeditious to expand the pipeline network primarily in those areas where it is economically more advantageous than traditional transportation.

About two-thirds of improving transportation is activity of construction character where achievement of the goals depends to a large extent on the construction industrial background. Improvement, maintenance and operation of transportation lines require special construction industrial capacities. The use of modern, highly efficient construction technologies, prefabrication, standardization, mechanization of construction, maintenance and repair activities must be increased.

Hungarian industry will continue to manufacture the necessary locomotives and buses. We purchase passenger and freight railroad cars, trucks and passenger automobiles, ships and airplanes mainly from the socialist countries. In harmony with the modernization of the vehicle park, the vehicle yards, repair, maintenance, service, spare parts and fuel supply networks must be improved. In the interest of better fulfilling the population's needs, in addition to the state-operated automobile repair industry the regional bases of the council- and cooperative-operated repair industry have to be increased.

Transportation's energy requirements increase by about 5 percent a year. The use of efficiently usable energy sources must be increased in transportation. The ratios of gasoline and diesel fuel must be decreased through broader use of natural gas and by placing into operation electrically driven vehicles in broader areas. Specific energy consumption must be decreased also through technical and organizational measures.

Decreasing the damage to the environment (noise, air and water pollution) is an emphasized task. The viewpoints of environmental protection must prevail as early as during the course of manufacturing and import, and especially during the construction of roadways and tracks of transportation. Mechanical control in the operation of vehicles must be increased and governmental measures must be observed. Rational reuse of discarded transportation equipment and their more important elements must be organized.

Utilization of the national economy's transportation capacity is an important task of branch management. In the interest of coordinating developments and efficient operating conditions, harmony among the development of transportation, industry, the construction industry and regional development must be insured by means of branch management. When residential areas are developed, care must be taken to create favorable transportation connections even in the planning stage. The tools of branch management must be applied more consciously than before in order to develop the correct dimensions of passenger and freight transportation. Initiatives must be taken and incentives provided for the better utilization of the transportation and loading capacities of industrial, construction industrial and agricultural operations.

The creation of modern techniques and technologies which make it possible to affect maximum savings of live labor, [maximum] manpower utilization and further increase of safety, are the fundamental tasks of technical growth.

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When we defined our long-range transportation goals, besides the country's economic opportunities we also took into consideration--and also continue to follow with attention--the development tendencies of transportation of the various European countries, the quality indexes of their technological growth, their transportation-policy ideas and the results of implementing them.

Keeping in mind the unique transportation characteristics of our country, this experience and information helped clarify certain questions in our ideas, and arrive at the clearest and best possible definition of our goals.

Just as in several other European countries, in the Hungarian transportation system--in spite of the dynamic growth of the share of public highway transportation--the role of the railroad is again on the increase in handling transportation tasks. Considering this, emphasis must also be given --in accordance with our social policy goals--to the improvement of mass transportation and to questions of implementing the freight transportation chain, coordinated at the national economy's level.

I think this present international conference is also a useful opportunity for the transportation experts to mutually exchange their ideas, opinions, experience and, when they return to their places of work, put to good use the things said at the conference.

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SUPPORT FOR CERTAIN UNPROFITABLE FARMS TO BE DISCONTINUED

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 15, 9 Apr 80 p 21

[Article by Gabor Boda]

[Text] Decree 31/1979 (XI.1) (Council of Ministers) declared that those agricultural enterprises where the per capita profit (that does not include price-adjustment and natural-disaster payments) fell between 10,000 and 20,000 forints will receive 50 percent of the usual price support in 1980. They will receive no price support in 1981. In this year we will end the support to those enterprises that have geographically unfavored circumstances; where the per capital income exceeded 20,000 forints in the 3 years mentioned in the decree (1976, 1977, 1978). Accordingly, from 1980, 36 agricultural cooperatives and 8 specialized cooperatives will not be among the farms that are classed as having unfavored geographic circumstances.

Management Characteristics

The 1978 farm management analysis shows the following characteristics.

1. The average growing area of cooperatives approached 3,700 hectares. On the average, the unfavored cooperatives have 230-240 hectares less. The farms that will not receive support do not have 3,000 hectares growing; in fact, one-third of these have less than 1,500 hectares. In spite of the fact that a farm produces less value than the average, the use of the growing area can be regarded as satisfactory: The production value per hectare is only 3 percent below the cooperative average. Their tool park is proper for their size and the productivity of their use is favorable.

The ratio of agricultural production is 67.7 percent nationally (cooperatives). One-third of the reclassified farms have less than this value but 64 percent have more. In five farms, the ratio is above 90 percent, in seven it is about 50 percent and only in two (very small farming areas) is it below 20 percent. The cooperatives that were not classed amount to 2.6 percent of the cooperatives and produce 2.1 percent of the output of cooperatives. Their work force is similar to the ones above. The success of the newly reclassified farms is shown by the fact that they produce nearly 30 percent of the results of the "geographically unfavored" cooperatives. They produce 3.6 percent of all cooperative output. To show the utilization of capacity, we point out that their per-hectare output is 70 percent above the cooperative average. Their profit per 100 forints of production value is 75 percent above the cooperative average; their profit per 100 forints of production tool value is 72 percent above the cooperative average.

The size of profit per person (36,755 forints, a very high value) which led to the end of the support, is 68 percent above the cooperative average and nearly triple the average profit in the "geographically unfavored" cooperatives. In only six of these farms is the profit per worker less than the cooperative average. In 10 farms, the profit exceeded 40,000 forints per person--which is laudable even in the best cooperatives, especially if we note that in 8 of the farms the agricultural production is above 62 percent and in 4 it is above 80 percent.

2. Before the regulation change, 65 percent of the specialized cooperatives qualified as "geographically unfavored." The change drops their number by eight in Bacs-Kiskun County. Since the drop occurred only in this county and the main problems and the farming conditions of the specialized cooperatives operating there are nearly identical, from here on I shall be dealing only with the characteristics of the specialized cooperatives in this area.

The specialized cooperatives that ceased to qualify for support amount to more than 20 percent of the geographically unfavored specialized cooperatives in the area. They have about 40 percent of the tool value, about 33 percent of the growing area, and produced 34 percent of the output in 1978. It makes one think: The slightly larger than average size and better tool and labor conditions led to a significantly higher result since they produced 54 percent of the profit of the group. They had 53 percent agricultural production ratio.

Nonagricultural activity is decisive in production. This can be seen when we realize that although their per-hectare production value is only 5 percent above that of the county's supported specialized cooperatives, their company profit is 66 percent above them.

To show how effectively they use their tools, their profit per 100 forints of tool value was calculated and found to be 10 percent above average. This also indicates their more tool-intensive production structure. The per capita profit (whose size led to the ending of support) is very favorable in these cooperatives--it is 40 percent above the supported cooperatives in the area. But we should also observe that the differences in productivity are very large and the very good results are seen in only three farms--primarily due to their auxiliary activities.

The end of support places the managers and members of the farms in a difficult situation. The stricter regulation places increased technical demands on everyone, demands which can be fulfilled by a detailed analysis of the internal conditions and a harmony of ways and means.

The Significance of Collaborations

Due to the difference of conditions and possibilities, most tasks differ from farm to farm. It is basic, however, that the gradual simplification of the production structure requires the ending of losing lines. Thrift with production factors should not mean a delay in investing in necessary things but a more profitable production. Thus, in plant growing, it means using seeds that give the highest yields in the circumstances. In fertilization, differentiated fertilizer use and micro- and trace-element supplementation should depend on soil analysis only. In transport, organization should improve. In animal keeping, the daily weight gain should not always involve higher feed requirements. Our experience is that in farms the formation of an organization that adjusts well to conditions, material-incentive increase, and better coordination of work brigades are important reserves.

Increased collaboration of the farms in various profitable activities is to the good. This applies especially to collaboration with industrial companies. Our analysis shows that this will increase rational employment.

In sum, we can say that the ending of subsidies in 1980 to these farms was reasonable. These farms, especially the cooperatives, adjusted to their natural conditions and most of them had profitable auxiliary activities. They managed their manpower and tools satisfactorily and, in many cases, very favorably. Their action and the support they received created the conditions for completely self-supporting management and made it possible for the subsidy to go to farms that need it more.

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COORDINATOR OF PROTEIN FODDER PROGRAM INTERVIEWED

Budapest HETI VILAGGAZDASAG in Hungarian 29 Mar 80 pp 30-31

[Interview with U. Pal Kralovansky, coordinator of protein program, by Jeno Istvan Szatmari: "We Feed 50 Billion Forints' Worth of Fodder Each Year"]

[Text] The protein situation, or more precisely the issue of protein fodders, has for years been a concern not only to the experts. It indicates the question's importance that it repeatedly receives space also in the MSZMP Central Committee documents. What really is our situation with the domestic production and import of protein fodders? We asked U. Pal Kralovansky, head of the Protein Program Office of the National Technical Development Committee [OMFB] about this. For 10 years the 54-year old agricultural engineer worked as scientist at the Animal Husbandry Research Institute, then for the same length of time at the Meat Industry Research Institute. He has been working at the OMFB since 1967, and since it was formed he has been heading the Protein Program Office with the rank of main OMFB department head. He remained close to scientific research, first he was an assistant professor at the University of Agricultural Sciences in Godollo, now he is an honorary full professor at the University of Agricultural Sciences in Debrecen.

HVG.:(HETI VILAGGAZDASAG) (World Economics Weekly): The average person's opinion is: decades ago we also fattened livestock, and we also exported them, even though at that time not even a word was spoken about protein fodder import. What has changed since then?

K.P.: I would answer that with an example: in the last 15 to 20 years animal husbandry has progressed much faster than the growing of crops. The new animal types, the hybrids grow very fast. When I was a child, a chicken grew to hardly half a kilo in 6 to 8 weeks, while today a broiler chicken reaches a live weight of 1.4 to 1.7 kilograms in the same time. However, the proper feed is necessary for this, with concentrated protein content. Just as the higher-performance automobile operates well only on higher octane gasoline, the same way feed with higher protein content is necessary for more productive meat, milk and egg production.

HVG.: Why can we not produce all this here in this country?

K.P.: It would not be true to categorically state that we are unable to produce this here in this country. Today we provide approximately three-fourths of the domestic animal stock's protein requirements on nearly 4.4 million hectares of area used for producing fodder. And even though in comparison with the levels of 20 years ago we have achieved a nearly one and a halffold production increase, during the same time production of animal products doubled! Thus the difference in growth rates must be supplied from imports.

HVG.: What are we importing?

K.P. Primarily ground soya, and next ground peanuts, fish meal, meat flour and powdered milk. In 20 years, our protein fodder imports increased about sevenfold, today it is over 700,000 tons. This costs over $200 million per year, and we want to cut down on this foreign currency expense.

HVG.: Where does the import come from?

K.P.: Ground soya mainly from the United States and Brazil, ground peanuts from India, fishmeal from Peru and from the Scandinavian countries, and meat flour and powdered milk from Western Europe.

HVG.: Are there no purchasing opportunities from within the CEMA?

K.P.: Only of practically negligible extent, with the exception of some dried blood and powdered milk.

HVG.: What kind of market situation will we have to expect on the fodder front?

K.P.: The world's countries can make available for the international purchasing market annually about a 100 million tons of feed grain and protein fodder. All those countries in which animal raising is done on a more significant scale or where there is insufficient area for growing fodder, make their purchases from this. In general we can say: where population density is high ahd there is also much livestock, where meat, milk and egg consumption are high in harmony with a high standard of living, 10 to 15 percent of the protein fodder demand is being imported. This is what France, Holland, the FRG and even Denmark do. On the basis of this, our import is not some kind of a special Hungarian phenomenon, either.

In the countries mentioned, a person "consumes" 1 ton of grains per year on the average, but of this the share of flour, bread, rice and pastry is only 150 to 250 kilograms, the rest is being eaten in transformed form, that is, it is being fed to the animals in order to obtain meat, milk and eggs. For example, for 40 kilograms of pork with bones, the animal has to be fattened to 110 kilograms; for this, feed grains of 450 to 550 kilograms are needed, that is, one kilogram of pork with bones what gets on the table "swallows"

9 to 12 kilograms of corn and barley. Few people think it through that from the viewpoint of protein, hogs and poultry are man's "competitors for food," while cattle and sheep are not--these consume vegetable fodders with higher fiber content. Thus, improvements can be made from two directions on the protein balance: modifying the livestock composition to the benefit of ruminants as against omnivores, or increasing the ratio of protein-rich cultures in the planting structure of fodder crops.

HVG.: How could this be achieved?

K.P.: For example, by growing plant types with higher protein content, or the biological value of the protein content of which is higher. Thus we can not only obtain more protein from the same land area but can also make the feed composition of the animals "more complete," the feed can be better used. Efficiency improvements count for much here: if we consider only that today we feed 50 billion forints' worth of fodder per year, even only 1 percent of savings would mean a cost decrease of 500 million forints.

HVG.: Beyond this, what other opportunities are there for possibly substituting for the imports?

K.P.: One of the ways to do this is to change the livestock structure, the ratio of types. Another way is to grow fodder which the livestock inventory needs. In my opinion, we must proceed toward both these goals simultaneously, because, for example, if we wanted to reach our goal by proceeding only on the second road, that is, growing enough for self-sufficiency, the fodder growing area would have to be increased by 500,000 to 700,000 hectares. And there is no way this can be accomplished in the medium-range future.

HVG.: Great results were being predicted 10 to 15 years ago for experiments conducted with proteins which can be produced from hydrocarbons, for example, protein production based on petroleum. I assume that this is no longer a promising vista?

K.P.: Yes, the experiments began 18 years ago, for example, to convert paraffins to protein. After overcoming the environmental-protection and health-care difficulties, converting plants with 50,000 to 100,000 tons of capacity began operation in Japan and in France, but as a consequence of the oil crisis these developments were soon abandoned. At this time, further work is being done on fermentation of methyl alcohol. ICI's plant in Billingham, England built with an investment of 40 million pounds recently began operation. Here 300,000 tons of a product named "Pruteen" is produced annually, with 74 percent protein content. It can be used to substitute for fishmeal and ground soya in the feed for hogs and poultry.

HVG.: Would it not be worth it to consider building such a plant in this country? With a one-time expenditure many years of imports could be saved. To put it simply: the investment would return very quickly even if we look at it in terms of foreign currency, even if not in the form of direct export.

K.P.: The production of fermented single-cell protein obviously offers a promising opportunity as far as the future is concerned--but in Hungary the construction of such a fermentation plant is not being planned yet for the next plan period.

HVG.: How is energy frugality being interpreted in protein production? Saving energy is a factor which replaces imports.

K.P.: This is true, and I would also support this with an example: to produce the same amount of protein, six to seven times more energy is needed in corn production than in soya production. The primary reason for this is that while the soya can use nitrogen from the air directly by means of a micro-organism named rhizobium which lives in symbiosis with it, for corn most of its nitrogen requirements have to be supplied by chemical fertilizers. According to some calculations, while 3 to 5 percent of the energy needed to produce vegetable protein is required by planting and plant protection and 6 to 18 percent by soil preparation, 49 to 68 percent of the energy need is consumed by the production of chemical fertilizers. If we grow soya or other seeds with pods, most of this becomes unnecessary, thus over the long range it is worth working on larger scale to grow this type of fodder crops, particularly since we know that we also import a significant portion of the chemical fertilizer requirement.

Decreasing the energy used for drying is another source of saving energy. The practice of bringing virtually all crops into the air-dried state is not a correct one. Though in a more advanced form, it would be worth returning to the method used in earlier decades, to drying by natural means or to use moist fodder for fattening. But it would cause no harm either to grow crop types with shorter growing times and which have lower moisture content at harvest time, thus not requiring additional, artificial drying.

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CONDITION, USAGE OF AGRICULTURAL MACHINES ANALYZED

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 15, 9 Apr 80 pp 3-4

[Article by Gyula Poden, member of the Industrial, Agricultural, and Transport Department of the Central Committee of the MSZMP]

[Text] In the coming period--especially in plant growing--a basic need will be an economical increase of crop yield. One of the determining elements of this is adjustment to the conditions that are given in the soil. The realization of the adjustment, in turn, depends largely on the material-technical level of the agricultural enterprises, the continuity of supplies, and better use of existing tools.

There Are More Large-Capacity Machines

The level of mechanization fundamentally decides timely, good-quality, and low-loss work. Thus, the agricultural enterprises paid special attention to these factors in the 1970's. As far as financially possible, structural changes were carried out with power and work machines. Machine systems were employed to an ever-increasing extent and the ratio of large-capacity and self-moving machines were especially increased in the second half of this period.

The Fifth Five-Year Plan has consciously counted on this rearrangement, in spite of the fact that, in practice, it is not yet certain that the idea will be carried out 100 percent. The plan is to invest 61.7 million forints for machines by the enterprises. By the end of 1979, nearly 53 billion was spent (86 percent of the projected amount). This is a 5-percent overfulfillment. In quantity, this is less than planned because during this time imported machines rose 10-30 percent in price.

The overfulfillment shows dramatic, dynamic progress by agricultural enterprises due to the broad front and quick spread of production systems. In the past 3 years, the pulling machine capacity grew 22 percent and approached 7 million kW (9.5 million HP) by the end of 1979.

This increase is due to the fact that the number of tractors gradually decreased (6.7 percent) while their capacity increased 9.4 percent. Wheat combines increased but little in number but the number of larger-capacity machines (over 6 kg/sec transmittance) grew at the same time. The structure of the enterprises' machine park was also modified by the fact that fewer tractors but more trucks were bought (36 percent) than planned. We regard this trend by the agricultural enterprises as favorable because it helped the modernization of machine capacity.

The significance of the modernization of transport is exceeding: Half of the machine-done work in agriculture is material movement. Considering quantities, agriculture is one of the largest transporters among the branches of the economy. Every year, several million tons of material, closely connected with production, have to be transported. In 1980, 230 million tons will be carried. The increase of material to be transported will basically be determined by increased yields. It will be also influenced by higher use of industrial products and an increasing utilization of by-products. Animal husbandry also increases, in accord with our goals. An increasing ratio of the higher yield will be exported, which also places demands on transport capacity. In agriculture, the size of transport need is not even and depends on work peaks. The demand can only be satisfied when it is synchronized with other branches of the economy. We try to use agriculture's transport capacity in an even manner. The agricultural enterprises have taken only the first steps in this respect, as they increased their capacities.

The Process of Modernization Has Slowed

The increase and modernization of the machine park's capacity made it possible for the agricultural enterprises to spend 14 percent less time on a hectare with tractors, harvesting, and self-propelled machines than in 1975.

The machines' modernization process has slowed in the second half of the plan period. The narrowing of the material basis was felt as early as 1979; the process has extended to 1980. This is not a favorable phenomenon because the modernization of machines and tools is needed. The number of tractors that depreciated to zero value increased and their ratio reached 23 percent. This ratio is especially high in the state farms where every fourth tractor is, on the average, written off. This causes especially great problems at peakwork times when the available machines cannot carry out the work properly and on time. This tendency is not only true for tractors but also of all machines although the extent of amortization differs from one machine to another. Thus, with trucks, in spite of a more dynamic purchase pattern, the ratio of fully-amortized units has reached 10 percent.

In spite of the unfavorable phenomena, this tool park represents a vast potential strength. The gross value of agricultural machines, implements, and vehicles exceed 80 billion forints at the end of 1979. The agricultural enterprises count on further machine investments to carry out their 1980 tasks. To satisfy the new machine purchases, there is 13 billion forints' worth of machinery from which the bulk of the needs can be met. Thus the goods are present. The concern is more on the side of agriculture's sources of money. The number of state farms and agricultural cooperatives that have very little money or no money at all for development, has increased. Further, in the future, more domestic machines and socialist imports and less capitalist imports will be the case.

With capitalist imports, the principle will be to buy machines and implements that cannot be had from domestic or socialist sources and are essential to production. We can deviate from this principle only if the imported machine or implement dynamically increases the capitalist export of agricultural products or makes possible large savings in energy (and thus energy imports).

This means that our thinking and acts have to show that our 1980 tasks have to be carried with new domestic or socialist machine imports and by a better use of our existing tools. One of the conditions to realize production goals and more efficient farming is to maintain the existing machine park and to use it well.

Good Maintenance--Better Use

The tasks assume that we get 2-3 percent more out of tractors and self-moving machines. The machine park's use should improve and the level of its services should rise. The production goals can be reached when the expertise of machine handlers, repairers, and drivers improves and when work organization reaches a higher level.

It is thus of main importance that the machines be ready in time and in proper numbers. For this, we need proper repair bases, a good supply of parts, good machinists, and planned, preventive maintenance.

The parts supply of agricultural machines has been generally satisfactory in the past years although it was not undisturbed. This year, the orders correspond to the supplies. This does not mean that there will not be a transient or lasting lack of one part or another which will cause difficulties but these cannot bring the solution of national tasks into question.

There have been several moves in the past years to improve the maintenance and repair of agricultural machines and to improve technical service. As a result, planned development started, but slowly--partly because finances were narrow. In spite of this, the situation in 1980 is not good.

At the end of 1979, agriculture had 1,742,000 m^2 shop space. Of this, only 800,000 m^2 is usable for repair and maintenance. Most shops are small and many are poorly equipped. There are but few modern shops, built in recent years. In spite of accelerated construction, we have only 240,000 m^2 of such schops.

The present situation does not make it possible--and it is not proper, even in the long run--that every agricultural enterprise should have a complete repair facility. In the new investments, machine repair has to be organized on a partnership basis among neighboring enterprises. Higher demands have to be placed on industrial companies that provide services; they have to be spurred to raise their level of services. In this respect, the local leadership and the attention and responsibility of the communists in the district is very important. It is important to exploit existing tools and to create the necessary capacity. Everyone has to be warned to avoid duplication of facilities.

For the agricultural enterprises, it is important to repair machines quickly and expertly and have the service work carried out under the guarantee. Yet, the largest job falls on the shops of the state farms and cooperatives. At present, 61,000 skilled workers are employed in agricultural repair and maintenance shops. Some (30-35 percent) of the skilled workers have been trained to repair certain special agricultural machines. Some of the tractor operators will also participate in repair work in the off-season. The 2,150 mechanical engineers and 220 technicians also represent serious strength: They direct and organize the work and often do practical work.

In past years, the devoted work of the repair shop workers had a big role in satisfying the machine needs of agriculture. They carried on even in periods when after a rainy summer they would produce repaired power machines and work tools for the peak fall working rush. Nationally, this is a big strength but let us not forget that there are still large variations in the level of repair and maintenance today in agricultural enterprises. Hence there is much to do, much reserve in this area.

Hard work always brings results but this year more is needed because the machine park is older and the ratio of completely depreciated machines has increased. It is not enough to do more in repairs and maintenance, more care has to be expended on the operation of machines.

Energy Saving Is a Basic Necessity

In recent years, energy economy has been gaining in importance in the life of the country. In the past 18 years, agriculture's energy use grew 4.5 times. It now uses 30 percent of the country's liquid energy carriers (those with the greatest supply problems). Agricultural production now uses 785,000 tons of fuel and 670,000 tons of fuel oil every year. Within this, tractors use 410,000 tons of fuel, trucks 190,000 tons, product drying takes 380,000 tons, and heating of animal shelters takes 180,000 tons. The total cost of all exceeded 8.5 billion forints in 1978.

This is no small change and how we manage imported energy carriers is not immaterial. Several moves were made recently in the interest of thrift and rational management which are already producing good results. It is important that in the area overseen by the Ministry of Agriculture and Food, energy demand grew only 4.6 percent annually in the last 3 years--instead of the 10-percent annual increase that was manifest in the Fourth Five-Year Plan.

Several state farms and cooperatives took professional energy management seriously and made proper moves. Thus, in the Mezonagymihaly State Farm the use of fuel and lubricating oil for power and self-moving machines is now regulated by presidential directives. Every machine has a logbook. The enterprise produced specific indexes for every working hour, shift, and hectare for each type of machine. They analyze logbooks monthly, and sometimes more often, watch the condition of the machines, and base their action on the logbooks. These moves and the strict order saved 8 percent in fuel last year. Several other such examples could be mentioned.

Along with the good initiatives, it can be said that energy economy is not yet a permanent element of management at agricultural enterprises. Waste, laziness, poor work organization, and poor discipline still occur. Ending these would make further savings in energy without any investment.

It is also true that the modification of existing technologies and the introduction of energy-saving methods and procedures is closely connected with investment possibilities and modernization of material and technical levels. Therefore, in this coming period the main emphasis should be laid on energy-saving management that can be instituted with little or no investment.

In this task, the most important element is that the thinking of the leaders and the workers of the agricultural enterprises change. We have to reach the stage where this view permeates our everyday actions and life. Energy saving and better work has innumerable possibilities in every area. Such possibilities, in the area of agricultural machines and equipment are:

--Ending unnecessary machine and material transport and assuring continuous feeding to the machines;

--Preparing energy-saving soil operations (at present it takes 15-20 kg fuel to work over 1 hectare). The direct and indirect requisites of the rational organization of soil operations have to be brought closer;

--Less artificial drying. It would be good to select strains that adjust to the climate. The agriculture and forest byproducts that are not yet used, could be used with the right conditioning, as energy reserves and not just as fodder;

--There are possibilities in the future to use biogases, geothermal energy, and powerplant waste heat. Their utilization has to be mutually exploited.

The execution of the 1980 tasks is connected, in several ways, to the realization of our more distant goals. The successful fulfillment of the plan gives us a chance to start the Sixth Five-Year Plan the right way. This plan period is closely connected with the development of mechanization and the raising of our technical levels. The situation of 1980--a narrower material base--is the prognosis of the years beyond as well. Therefore as machines are bought and used, we have to act with the full knowledge of reality. We cannot give up large-capacity machines and machine systems and increases in truck transport--only the rate of realization of these goals will be slower.

Man's role always increases in difficult situations. Men work with the machines, direct them, organize the work, assure the conditions of operations. It is important for all of us that the workers do this important work consciously, in a disciplined manner and with devotion. We have to strive for the optimum assurance of production by the maximal exploitation of the possibilities and resources.

As the agriculture leadership was reorganized, the enterprises' independence increased--along with their responsibilities. Similarly, the importance to recognize existing shortcomings or faults in the state farms and cooperatives and the prevention of damage also increased. They have to be ended from within. Along with the managers, the responsibility of communists also increased: They should uncover mistakes in time and help to create the atmosphere to insure economic production.

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POLAND

DECISION-MAKING IN FOREIGN TRADE PLANNING EXPLAINED

Warsaw HANDEL ZAGRANICZNY in Polish No 11, 1979 pp 41-43

[Article by Aleksandra Duliniec: "The Use of Games with Nature in Foreign Trade Enterprise Decisions"]

[Text] Planning foreign trade is a basic activity in the management of foreign trade at every administrative level.

Every decision made requires a certain amount of information, on the basis of which it is possible to obtain an optimal decision by using suitable techniques and methods. Thanks to the application of mathematics and statistics, the information collected is transformed into optimal decisions. Such methods are called operation research, employing deterministic programming (linear and nonlinear), the principles of calculation of probability and games theory in reaching decisions.[1]

At the present time linear programming and statistical methods are used quite extensively in the process of making economic decisions. In cases where the methods and conditions of activity of economic subjects are not perfectly known, but only their hypothetical variations, and where these subjects have almost complete freedom in decision-making, it is possible to use decision techniques derived from games theory. This is particularly useful in foreign trade.

Decision-making in foreign trade is conducted under conditions of major uncertainty, not only in view of the sovereignty of the states and trade enterprises taking part in exchange, but also in view of the impossibility of perfectly establishing such parameters as rates, prices and so on. Definite economic events can, but need not, appear (for example, the introduction or lack of introduction of import restrictions, the existence of certain political phenomena directly affecting economic measures).

National political authority only affects its own economic units, while foreign partners enjoy a high degree of independence. Thus, in planning on the effects of exchange abroad, it is not always possible to restrict oneself to a single solution. It is often necessary to develop alternative solutions as a function of the existing initial situation (decisions of a foreign partner, the world market situation and so on). Increased uncertainty means that the result of our activity depends to a large degree on factors independent of our will.

In foreign trade games theory is most often applied to situations of conflict, when the interests of partners taking part in exchange are incompatible or at least not in accord (narrowly competitive games or cooperative two- or nth-person games). In addition to games between two or more partners, there are also so-called games with nature. Then the object of analysis is the behavior of one player, and the conditions of action are determined by natural conditions. In such games there is no conflict of interests.

When we examine trade exchange on the central level or on the level of a foreign exchange enterprise, we find that the results of many transactions do not depend on the decisions of a concrete trade partner, but on the changing conditions of the world market.

Thus such a game is not antagonistic by nature, and we can treat it as a game with nature. The strategy which A has to choose and the effects of his actions depend on which of the natural conditions (market situation) is involved in a given case. We have to do with so-called risk events,[2] or situations in which there is no certainty as to the result which will be obtained. The decision maker is not capable of foreseeing whether the intended goal will be achieved or will meet with failure. The results of a definite decision depend on events which cannot be anticipated with complete certainty.

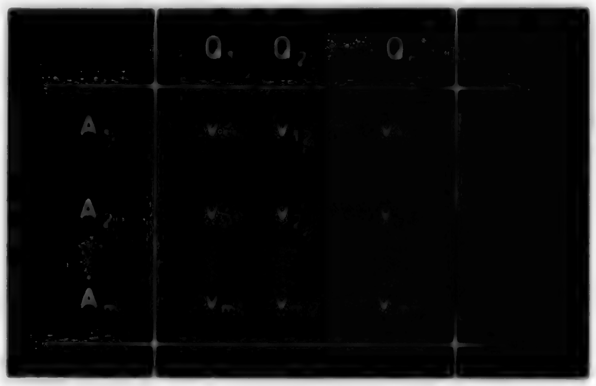
The economic subject (A) may or may not possess supplementary information about the conditions of nature. Lacking such information he will make decisions under conditions of complete uncertainty. When he has such information, the conditions of nature (so-called market strategies) can be treated as random events with a definite distribution of probability. It is then said that decisions are made under risk conditions, meaning: There is a probability of achieving an effect different from the one anticipated in making a certain decision.[3]

Decisions on the enterprise level can be treated in many cases as activity under risk conditions. Market analysis and marketing research provide a great deal of indispensable information on the subject of anticipated market situations, and the application of the calculation of probability makes it possible to formulate an optimal decision under these conditions. However, there are situations in which it is not possible to obtain information regarding future events, events which will affect the results of the activity of a foreign trade enterprise. Examples of just such situations will be presented below.

At the present time there has been an increase in the range of occurrence of uncertainty in the decision-making process, associated with international trade both in capitalist economy and in socialist economy. This is primarily the result of the acceleration of technological progress and constant change in the world currency market.

There is a well-known matrix for payments for games with nature (v_{ij}), the elements of which assume non-negative or negative values, providing information on advantages or losses to be derived from exchange by the economic subject (A) in a case where he selects the ith decision variation A_i ($i = 1 \ldots m$) with the existence of a jth condition of nature Q_j ($j = 1 \ldots n$). We can designate the function of usefulness as $W(A_i, Q_j) = v_{ij}$. The player attempts to maximize the value of this function (payment magnitude).

The payment matrix can be presented as follows:



$$\begin{array}{c|cccc}
 & Q_1 & Q_2 & \ldots & Q_n \\
\hline
A_1 & v_{11} & v_{12} & \ldots & v_{1n} \\
A_2 & v_{21} & v_{22} & \ldots & v_{2n} \\
\vdots & & & & \\
A_m & v_{m1} & v_{m2} & \ldots & v_{mn} \\
\hline
\end{array}$$

The preferences of the decision-maker are definite, but his knowledge of external conditions is very uncertain. It is assumed that the economic subject knows only the market situation variations, but has no information about which condition of nature exists in reality. From his point of view the probability of occurrence of any condition of nature Q_j is equally likely.

There is no conflict of interests between the player and the market, there is no antagonistic game in which various criteria aiding the choice of an optimal decision are possible. The adoption of a definite criterion depends on the subjective decision of the player (the knowledge and experience of the economic subject in the area of laws governing the international marketplace).

Up to now the practical decision criterion most often used in games theory is the mini-max criterion (also called Wald's principle). In games with nature it is defined pessimistically. This is because it assumes that the subject making the decisions should use the keenest strategy, which is the most favorable reaction to the most unfavorable market situation. In accord with this criterion the lowest element is selected from each line of the payment matrix, and then the greatest element among those previously distinguished in each line is chosen. In many cases we can actually recognize the mini-max strategy as optimal in games with nature when assurance of minimal loss is involved.

There are also other decision criteria, including Savage's principle, Hurwicz's principle and the "lack of sufficient reason" principle).[4] However, these are used very rarely because of their extreme subjectivity in determining the parameters of the selection function.

The use of games with nature can solve many problems associated with import-export activity in foreign trade enterprises. Building decision models makes it possible to present a great deal of information concerning conditions, methods of action and goals, and choice criteria in a point or interval method as definite model parameters.[5] However, there are situations in which we do not have unambiguous information on the above points and must deal with the fact that given economic events can, but need not, occur (for example, a change in the currency rate or goods prices, damage to goods during transport, the introduction of a new product on the market and so forth). At such times it is necessary to use an analytical model derived from games theory. These are models in which we know, at least for one parameter at the moment of making the decision, the set of values which this parameter can assume.

We shall now discuss examples from the field of foreign trade which can be solved by using games with nature.

Insuring Goods in Sea Transport

In the conduct of many export and import transactions, a foreign trade enterprise insures goods shipments at its own expense (for example, goods imported under fob or caf conditions, and goods exported under cif conditions).

The goods insurer takes into consideration various kinds of risks which goods are subject to during transport, makes a balance of benefits and losses, and compares the insurance rates and the amount of the premium (compensation) on the one hand and on the other the results stemming from unfavorable incidents. We shall discuss three selected types of events (conditions of nature) and three possible variations of goods insurance in sea transport.[6]

The events (in which there is no possibility of perfectly determining the probability of a given event occurring) are as follows:

Z_0 Goods undamaged and delivered on time to the customer (losses $S_0 = 0$);

Z_1 Goods damaged as a result of stormy weather during transport (losses S_1);

Z_2 Goods delivered late as a result of a port workers' strike (losses S_2).

Additional assumptions are:

$S_j \geq S_k$ for $j \geq 1$, so-called insurance covers damage when losses exceed a certain definite amoung S_k (in agreement with an integral franchise).

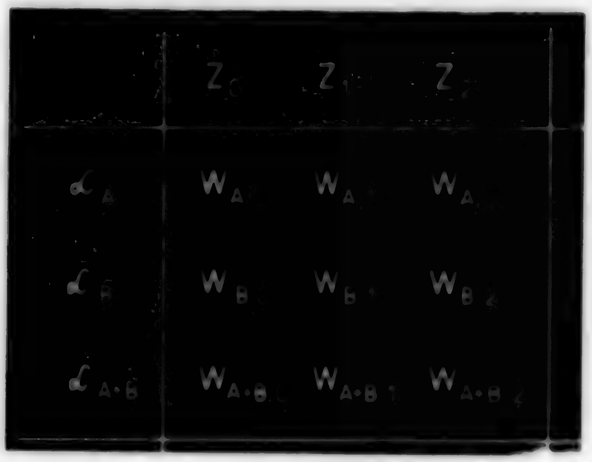
The decision variations are:

α_A Insurance in accord with the WPA (With Particular Average--from individual damage) clause
Magnitude of insurance rate--A
Magnitude of premium--P_A

α_B Insurance in accord with an insurance clause of risk associated with an increase in additional costs arising as a result of strikes (Strikes Additional Expenses Clause)
Magnitude of insurance rate--B
Magnitude of premium--P_B

$\alpha_A + \alpha_B$ Combinations of variations $\alpha_A + \alpha_B$
Magnitude of insurance rate--A + B
Magnitude of premium--P_A or P_B

The payment matrix in this case denotes the costs of insurance, that is, the magnitude of the rate and the balance of losses connected with the possible occurrence of unfavorable conditions during transport:
W_{ij} = costs of insurance + losses - premiums.



	Z_0	Z_1	Z_2
α_A	W_{A0}	W_{A1}	W_{A2}
α_B	W_{B0}	W_{B1}	W_{B2}
α_{A+B}	$W_{A+B\,0}$	$W_{A+B\,1}$	$W_{A+B\,2}$

$$W_{A,0} = A \qquad W_{B,0} = B$$

$$W_{A,1} = A + S_1 - P_A \qquad W_{B,1} = B + S_1$$

$$W_{A,2} = A + S_2 \qquad W_{B,2} = B + S_2 - P_B$$

$$W_{A+B,0} = A + B$$

$$W_{A+B,1} = A + B + S_1 - P_A$$

$$W_{A+B,2} = A + B + S_2 - P_B$$

Once we have a definite payment matrix, we can select a decision criterion. Wald's principle (mini-max criterion) is very suitable in this case, for it minimizes the costs of activity associated with insurance (W_{ij}) in even the most unfavorable external conditions (conditions of nature). Thus it selects the greatest element from each line and then the least from the ones previously selected. This is a rather pessimistic procedure.

Let us take the optimal decision variation respecting insurance conditions under given insurance rates, estimates of losses and damages.

Choice of the Moment of Purchasing Stock Exchange Commidities

Electronic plants require a new batch of raw materials for production (X tons of tin). The tin has to be delivered in 3 months. The purchase is made by a foreign trade enterprise which performs this kind of import transaction on the London Metal Exchange.

The most favorable moment of purchase must be chosen in the conduct of the purchase, in order for the price to be as low as possible.

The final price of tin (the future price) is known, P_f 15.I/15.x, the quotation of 15 October. Through its foreign agent the foreign trade enterprise can make a purchase for 15 October for delivery after 3 months at the price $P_f = 7{,}650$ pounds/ton. However, it can delay the purchase and make the transaction after 3 months at the price in force at that time (spot price), P_s 15.I.

The enterprise has various pieces of information respecting anticipated phenomena which can affect the formation of tin prices in the future. Two events are possible (conditions of nature in the game):

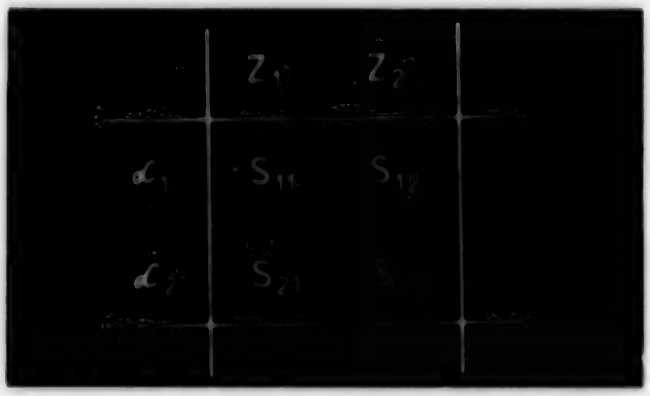
Z_1	The tin producers conclude a new agreement on the export of this raw material, which can lead to a price increase: $P'_s > P_f \quad P'_s = 7{,}800$ pounds,ton
Z_2	The implementation of new mining plants, the construction of which is nearing completion. This event causes a drop in the price of tin: $P''_s < P_f \quad P''_s = 6{,}900$ pounds/ton.

The importing enterprise has to choose a decision between the two variations:

α_1 Buy the commodities immediately;

α_2 Buy the commodities after 3 months have elapsed.

We have the following payment matrix:



	Z_1	Z_2
α_1	S_{11}	S_{12}
α_2	S_{21}	S_{22}

With the current future prices and the variations in the prospects for a possible spot price level after 3 months (drop or rise), the enterprise calculates the extreme possible losses or gains S_{ij} (all possible combinations of the decision variations in both anticipated events).

S_{ij} Amount of tin (factual purchase price--possible price level at a different purchase time)

$S_{11} = x(\overline{P_f} - P_s') < 0$ Enterprise gain

$S_{12} = x(P_f - P_s'') > 0$ Enterprise loss

$S_{21} = x(P_s' - P_f) > 0$ Enterprise loss

$S_{22} = x(P_s'' - P_f) < 0$ Enterprise gain

However, attention must be given to the fact that price expectations in the Stock Exchange are usually burdened with a great deal of error, and are usually difficult to form. Therefore the values S_{ij} are the only evaluations approaching the factual losses and gains.

By using the mini-max criterion we can minimize the risk of losses associated with the purchase of stock exchange commodities at the time of an unfavorable price level.

Security Against Foreign Exchange Risks in Exporting

In recent years foreign exchange rates have fluctuated frequently, and in such a situation the exporter tries to guarantee his foreign exchange revenues against a possible drop in the foreign exchange rate of payment.

There are three possible events:

Z_0 Foreign exchange rate, for example, the Spanish peseta, remains unchanged--k_0;

Z_1 Foreign exchange rate drops--k_1;

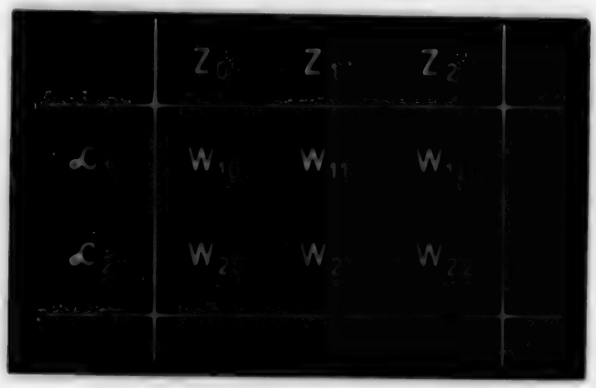
Z_2 Foreign exchange rate rises--k_2.

The exporter faces two decision possibilities:

α_1 He does not guarantee himself against a foreign exchange risk and receives a contract price at the level P_1;

α_2 He guarantees himself against risk, for example, by introducing a valorization clause[8] for a one-time small drop in export prices $p_2 (p_2 < p_1)$.

We have the following payment matrix:



	Z_0	Z_1	Z_2
α_1	W_{10}	W_{11}	W_{12}
α_2	W_{20}	W_{21}	W_{22}

W_{ij} — Foreign exchange revenues and export volume

$W_{10} = xp_1 k_0$

$W_{11} = xp_1 k_1$

$W_{12} = xp_1 k_2$

$W_{20} = xp_2 k_0$

$$W_{21} = xp_2' k_1 = xp_2(1 + r_p) \frac{k_0}{1 + r_p} = xp_2 k_0$$

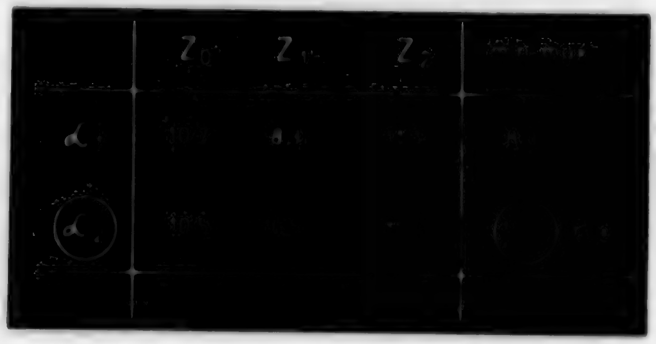
r_p Percentage by which price p_2 changes;

r_k Percentage by which rate of exchange changes, (in valorization clause $r_p = r_k$)

$$W_{22} = xp_2'' k_2 = x \left(\frac{p_2}{1 + r_p}\right) k_0 (1 + r_k) = xp_2 k_0$$

$$W_{20} = W_{21} = W_{22}$$

Numerical data of W_{ij} (foreign exchange revenues in thousands of zlotys) as examples.



	Z_0	Z_1	Z_2	[illegible]
α_1	[illegible]	[illegible]	[illegible]	[illegible]
α_2	[illegible]	[illegible]	[illegible]	[illegible]

Using the mini-max criterion, it is possible to draw the conclusion that in concluding an export transaction (especially if the payment rate is a "weak" rate) it is more profitable to slightly lower the price and renegotiate a valorization clause than to risk a reduction in the value of revenues from exports with a drop in the rate of the payment currency. This type of decision protects against large losses but, at the same time, can lead to an impossibility of making unusual profits in accurately predicting the movement of foreign exchange rates.

The above examples demonstrate that the game with nature model can be useful in foreign trade enterprise activities when unknown future market conditions come into play. However, it must be realized that the payment matrix elements are only anticipated values, not real ones. As in many other methods of planning, there is an extremely serious problem in using games, namely improvement in existing methods of prediction, both quantitative and descriptive ones. This, after all, renders possible a more precise calculation of the payment matrix for games with nature, and in this way reduces the margin of error in the process of selecting the optimal decision variation.

The complexity of trade relations between two or more partners, and changes in prices and rates of exchange means that, at the current state of knowledge, only selected decision tasks from the area of international exchange can be solved by means of games theory. Only a small number of real situations can be formulated in such a way that they meet the rather rigorous assumptions of various types of games.

However, games theory can be very useful in cases where other decision techniques and methods are lacking, that is, in situations where there is insufficient certain information respecting definite market parameters. For this reason there is a need for further improvement in decision models based on games theory.

With respect to the activity of a foreign trade enterprise under conditions of great uncertainty regarding prices, foreign exchange rates and so forth, it appears that the development of currently known methods in the area of the individual process of making decisions (games with nature) could contribute to optimizing the decision process in the field of exchange abroad on the enterprise level.

FOOTNOTES

1. D. Rosati, "Podejmowanie decyzji o ogranizacjach gospodarczych" [Making decisions on economic organizations], PWE [State Economic Publications], Warsaw, 1977, pp 103-104.

2. J. Kozielecki, "Psychologiczna teoria decyzji" [Psychological theory of decision], PWN [State Publishing House for Scientific Literature], Warsaw, 1977, pp 53-55.

3. J. Gren, "Gry statystyczne i ich zastosowania" [Statistical games and their application], PWE, Warsaw, 1972, pp 239-240.

4. R. D. Luce and H. Raiffa, "Gry i decyzje" [Games and decisions], PWN, Warsaw, 1964, pp 259-266. Particularly discusses defects and virtues of these criteria.

5. These are deterministic or stochastic models.

6. Examples of insurance clauses used in sea transport are taken from: "Organizacja i technika handlu zagranicznego--wybrane zagadnienia" [Foreign trade organization and technology, selected problems], SGPiS [Main School of Planning and Statistics], Warsaw, 1975, pp 142-147.

7. Premiums usually cover approximately 80% of losses.

8. A valorization clause anticipates a change in the price of goods in the proportions in which the rate of exchange of stipulated currency changes at the moment of payment in comparison with the moment of concluding an agreement. See "Vademecum Handlu Zagranicznego" [Foreign Trade Handbook], PIHZ [Polish Chamber of Foreign Trade], Warsaw, 1976, pp 55-56.

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INTERNATIONAL TRANSPORT PROBLEMS DISCUSSED

Warsaw HANDEL ZAGRANICZNY in Polish No 11, 1979 pp 48-51

[Article by Eufemia Teichmanowa: "Contemporary International Transport Problems in Poland"]

[Text] The Importance of International Transport for the Polish Economy

International transport, as discussed here, is the activity abroad by transport enterprises and their supervising central State authority bodies in servicing the hauling requirements of:

--Polish foreign trade,

--foreign trade of other countries with whom Poland has economic relations.[1]

International transport must fulfill two functions:

1) It must serve as a technical instrument of international exchange (an instrumental function),

2) It must serve as an instrument for activization and protection of the country's balance of payments (a profit-making function).

Both functions are not mutually exclusive and neither can be fulfilled without taking into account the forms and the relationships of outlays to profits. The accomplishment of each of these functions assumes that specific growth ratios in the country's transport system and in its contact with the international transport system will be established.

Transport services are the main item in Poland's services balance. During 1971-1974 they comprised over 50 percent of Poland's foreign services turnovers, but they are now clearly on the decrease. Railroad and maritime transport services are now in the lead. Railroad services (mainly in transit between the USSR and the GDR) make up about 80 percent of revenues from transport services.

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[1] Activities abroad relating to international passenger traffic services are excluded from the subject under consideration.

In the maritime transport services, line navigation heads the list, producing 70 percent of revenues while port services show a negative balance. International turnover of transport and transportation services in 1961-1974 averaged 6.24 percent of commodity turnovers; revenues were 9.38 percent of export value and expenditures were 3.4 percent of import value.[2] The transport services balance in the balance of payments does not, however, reflect the actual importance of transport for the economy, for it does not contain the foreign-exchange savings that result when Polish transport hauls commodities imported to Poland under fob conditions.

Thus a more complete picture of the importance of foreign transport activity can be obtained by analyzing the quantitative information on the directional and branch structure of transports. This type of information on Polish foreign trade transports in 1978 is shown in Table 1.

Table 1. Polish Foreign Trade Commodity Transports in 1978 (in thousand tons)

	(1) Gałęzie transportu	(2) Kierunek obrotów			(3) Udział procentowy		
		razem (4)	eksport (5)	import (6)	razem (4)	eksport (5)	import (6)
(7)	1. Ogółem	131.967	65.368	66.599	100,0	100,0	100,0
(8)	2. Transport kolejowy	57.935	28.758	29.177	44,0	44,0	43,8
(9)	3. Transport morski	59.769	35.499	24.270	45,2	54,3	36,5
(10)	4. Żegluga śródlądowa	825	739	86	0,6	1,1	0,1
(11)	5. Transport samochodowy	728	367	361	0,5	0,6	0,5
(12)	6. Transport lotniczy	10	5	5	0,0	0,0	0,0
(13)	7. Transport rurociągowy	12.700	—	12.700	9,6	—	19,0

(14) ŹRÓDŁO: Obliczenia własne na podstawie materiałów MHZiGM.

Key:

1. Transport branches
2. Direction of turnovers
3. Percentage share
4. Total
5. Export
6. Import
7. Grand total
8. Rail transport
9. Maritime transport
10. Inland navigation
11. Motor transport
12. Air transport
13. Pipelines
14. Source: Calculations based on Ministry of Foreign Trade and Maritime Economy materials.

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[2] Z.Dmowski: "Services in Poland's Foreign Turnovers", PWE [State Publishing House for Economics], Warsaw, 1978, p 115 and 123.

In 1978, for the first time in the postwar period, most Polish foreign trade cargoes were handled by maritime transport; rail was in second place, pipelines in third place. These changes in the pattern of transport must be looked upon favorably in view of the tremendous overloading of railroads by domestic and in transit cargoes. Foreign transports during this decade increased an average of 5 percent. Fuel[3] predominates in the transport pattern. The system of commodities flow does not ensure directional balance of haulage, which is felt very keenly in inland navigation and also in rail transport.

The directional pattern of transport results from the existing pattern of foreign trade. Accordingly, over half of haulage abroad is to and from socialist countries. Poland's foreign trade with socialist countries was serviced largely by rail--78 percent, then pipelines, 19.8 percent, and only 1.09 percent by inland navigation and 0.42 percent by motor transport.[4] Insofar as the western direction is concerned, specifically the EEC countries, Poland's export in 1977 was 88.2 percent of total cargoes transported from Poland to EEC countries and EEC countries to Poland. The share of particular transport branches handling export from Poland to EEC countries was as follows: maritime service, 85.3 percent; rail, 10.5 percent; motor transport, 1.1 percent; inland navigation, 3.6 percent. In servicing Polish import from EEC countries, maritime services' share was 44.2 percent; rail, 49.2 percent; motor transport, 5.8 percent; inland navigation, 0.8 percent.[5]

Forecasts on Poland's foreign trade haulage requirements (Table 2) indicate that maritime transport's share in servicing Poland's foreign turnovers are rising while rail's share is falling, which is regarded as a favorable shift in haulage patterns. Insofar as foreign cargo transport is concerned, a large increase in transit through Poland, mainly by rail, is anticipated. From 15.0 million tons in 1975, an increase to 31.6 million tons in 1990, i.e. almost 220 percent, is expected.

To keep pace with these haulage requirements, appropriate preparations must be made in the Polish transport system, especially at the point of contact with foreign systems. Thus the structural problems of every transport branch are becoming apparent.

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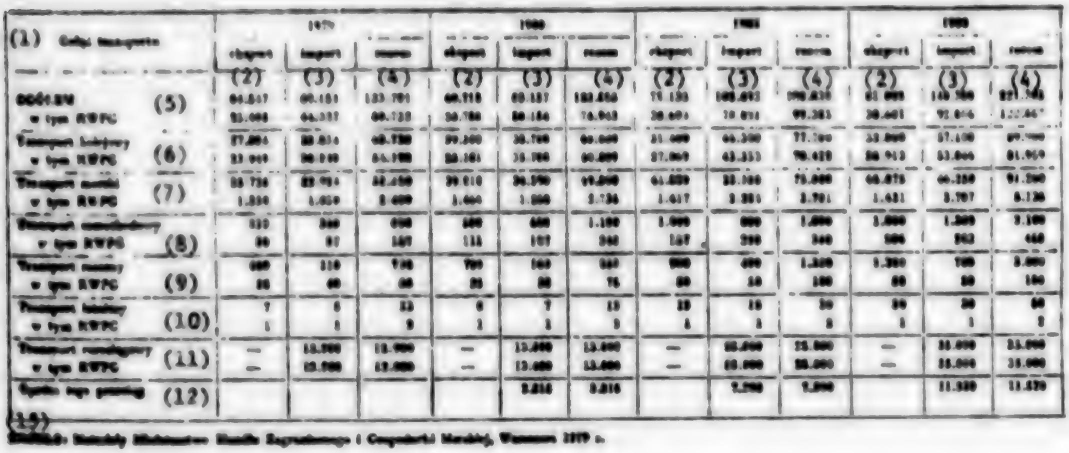
[3] For example, coal haulage in export and import amounted to 46 million tons in the past year.

[4] Calculations based on Ministry of Foreign Trade and Maritime Economy Materials do not cover air transport and inland navigation or transports to and from Cuba.

[5] Z. Podogrodzka: "Trends in EEC Transport Policies", Part II, OBET, Warsaw, 1979, p 6.

Table 2. Forecast of Polish Foreign Trade Commodity Haulage by all Transport Branches to 1990 (in thousand tons)



Key:

1. Transport branch
2. Export
3. Import
4. Total
5. Total, incl CEMA
6. Rail transport, incl CEMA
7. Maritime transport, incl CEMA
8. Motor transport, incl CEMA
9. River transport, incl CEMA
10. Air transport, incl CEMA
11. Pipeline transport, incl CEMA
12. In addition, gas pipeline
13. Source: Ministry of Foreign Trade and Maritime Economy materials, Warsaw, 1979.

Important Structural Problems of International Transport in Poland

Although it can be said that the ratio between requirements and capacity of maritime transport in servicing bulk cargoes is acceptable, there is a structural shortage of line fleet transport capacity and seaport transshipment capacity insofar as general cargo is concerned. Therefore, it is essential that the conditions listed in points 1, 2 and 3 be fulfilled:

1) Rejuvenation and modernization of the Polish line fleet; this means that specialized ships of the ro-ro, ferry and container type for hauling unit load cargoes must be purchased.[6]

Liner traffic is the most profitable form of fleet operation, hence the great importance attached to this form of traffic by all countries.

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[6] Through the Polish shipbuilding industry and purchases abroad.

Polish foreign trade cargoes are the basis of the shipowner's existence. Thus the liner fleet is an instrument of Polish foreign trade and at the same time is the largest exporter of maritime services. The average freight charge in the Polish Ocean Lines was $75, while in the Polish Steamship Company it was $5. According to forecasts, during 1975-1980 the number of tons of goods hauled by liner trade should increase 40 percent, while the pattern of general cargoes will change drastically in favor of unit load cargoes (3.5 million tons in 1985).

Polish Ocean Lines ships are divided into conventional, 92.7 percent, and specialized, 7.3 percent of total tonnage.

Average ship age in the last five years was as follows: 1973, 3.1; 1974, 9.8; 1975, 10.2; 1976, 10.8; 1977, 11.7. So from the standpoint of both type and age, Polish liner tonnage is noncompetitive. In the world liner fleet, conventional ships comprised 84.9 percent, and specialized ships, 15.1 percent of total tonnage. At the same time, the share of ships less than 10 years old in the fleets of selected countries in 1976 was as follows: Poland, 50.8; Sweden, 83.0; Norway, 83.0; Japan, 81.8; FRG, 79.2; France, 77.6; Great Britain, 77.2.

Lack of modern liner tonnage may eliminate the Polish commercial fleet from the seaways.

2) General adaptation of seaports to permit servicing of new types and sizes of ships for new hauling technologies, principally unit load general cargo; the construction of a container base in Gdynia is a key task for the entire Polish economy in 1978-1980.

The effect of Polish ports on utilization of commercial fleet capacity is shown by liner traffic, whose average time in port in 1977 was 63.8 percent, and time at sea was 36.2 percent of total operating time. In unscheduled traffic these proportions are reversed.

Ship servicing time in Polish ports improved on the average in recent years because specialized bases were constructed in Gdansk and Szczecin; nevertheless, some strains exist in specific cargo groups. Utilization of transshipment capacity in Polish ports, for example, was as follows in 1976: as pertains to coal, 92.3 percent; ore, 90 percent, other bulk cargoes, 76 percent, grain, 187.5 percent; timber, 81.8 percent; general cargo, 102.3 percent. Transshipment capacity of Polish ports for all bulk cargo transshipments was 96.5 percent utilized; for liquid fuels, 47 percent. Results indicate that insofar as dry and general cargoes are concerned, Polish ports no longer have the transshipment capacity reserves indispensable for handling unscheduled cargo deliveries and shipments. Such reserves, as a rule, are 15 percent of capacity and are imperative for efficient port functioning.

Despite the fact that in the past five-year period considerable means were allocated for port investments (triple that of the preceding five-years), there has been no improvement in general cargo servicing. Progress in incorporating new haulage technology--while the port base construction cycle was several times longer than the shibuilding cycle--has increased these strains. At the same time, there were shortcomings in the employment and condition of shore and river transport. As a result, Polish port capacity for general cargo transshipment is 61.7 percent of the capacities of the Antwerp, Rotterdam and Hamburg ports, 47 percent of the capacity of the New York port, and 54 percent of the Kobe port, and is on par with the capacity of such congested ports as Bombay and Karachi. This has a negative impact on shipowners and on Polish commercial trade.[7]

It is estimated[8] that annual costs of Polish shipowners attributed to ship layovers amount in fixed costs to 250 million zlotys, and lost revenues and potential for earning foreign exchange balances are about $10 million.

In foreign trade there occurred:

--an increase in expenditures for foreign freight ($9 million) resulting from sending container ships to West European ports (over $3 million);

--payment of allowances which foreign shipowners use to protect themselves from effects of lack of capacity in Polish ports and their transport support bases;

--delayed foreign-exchange revenues for exported goods; converted to amount of interest alone on intermediate credit this was over $1 million in 1976;

--an increase in contract penalties for late deliveries or damage from quantitative and qualitative losses of goods;

--difficulties in canvassing and an undermining of confidence of foreign customers;

--cost allowances for cargoes lying in warehouses and storage depots in Polish ports;

--a decrease in revenues from transit of foreign cargoes which ever more frequently bypass Polish ports;

--the difficult-to-determine costs of disruptions in production and consumption.

3) A search for noninvestment ways of increasing transport capacity; to aid in this, a third shipowner was organized in addition to the Polish Ocean

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[7] Ministry of Foreign Trade and Maritime Economy materials.

[8] Ibid

Lines and the Polish Steamship Company, i.e., the Polish Baltic Steamship Company, specializing in short-range hauling and reorganization of seaports based on creation of two port complexes of the Large Economic Organizations [WOG's] type.

The significant characteristics of the organizational changes, as a result of which the port complexes were created, are:

--the formation of two, instead of one, local management centers for managing the production capacity of seaports,

--the concentration of production capacity in each of the regions into one economic unit based on WOG principles,

--the formation in the Szczecin port-industrial-municipal agglomeration of an economic unit with the rank of an association, such as in the Gdansk agglomeration,

--changes in the subordination of enterprises,

--the entrusting of coordination of seaport commodities turnover to the "C. Hartwig" enterprise in Gdynia,

--adaptation of the general managers' powers to the new functions of the port complexes,

--expansion of the statutory scope of the complexes' activities.

The efficiency of port operations can be described by specific quantities (Table 3).

The amounts given point to the following favorable phenomena:

--a slight increase in employment,

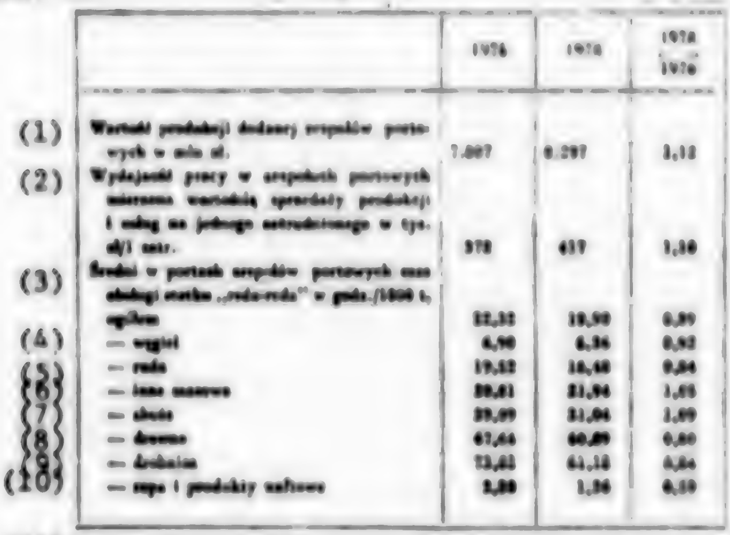
--an increase in most of the remaining quantities reflecting economic effects,

--a more rapid increase in accumulation and productivity than increase in employment,

--same growth rate of accumulation and productivity,

--a decrease in average amounts of time for servicing ships in all cargo groups except "other bulk" and "grain".

Table 3. Some Characteristic Data on Management of Port Complexes



		1976	1978	1978/1976
(1)	Wartość produkcji dodanej zespołów portowych w mln zł.	7.407	8.297	1,12
(2)	Wydajność pracy w zespołach portowych mierzona wartością sprzedaży produkcji i usług na jednego zatrudnionego w tys. zł/1 zatr.	378	417	1,10
(3)	Średni w portach zespołów portowych czas obsługi statku „reda-reda" w godz./1000 t, ogółem	22,32	19,90	0,89
(4)	— węgiel	6,90	6,36	0,92
(5)	— ruda	19,52	16,48	0,84
(6)	— inne masowe	20,81	21,94	1,05
(7)	— zboże	29,09	31,04	1,09
(8)	— drewno	67,44	60,89	0,90
(9)	— drobnica	72,81	61,12	0,84
(10)	— ropa i produkty naftowe	2,30	1,36	0,59

(11) Źródło: Materiały MHZiGM.

Key:

1. Added production value of port complexes in million zlotys
2. Productivity in port complexes measured by value of production sales and service for each worker in thousand zlotys per one worker
3. Average time for servicing "reda-reda" ship in port-complex ports, in hours per 1,000 tons, grand total
4. Coal
5. Ore
6. Other bulk
7. Grain
8. Timber
9. General cargo
10. Crude and petroleum products
11. Source: Ministry of Foreign Trade and Maritime Economy materials.

The values given above also point to the following unfavorable phenomena:

--slower increase in transshipment capacity than increase in transshipments,

--continued unacceptably large absolute amounts of time for servicing "reda-reda" ships, except for amounts in the following cargo groups: coal, crude, and petroleum products,

--a too-slow rise in investment outlays.

The above data do not reflect the situation in relation to cargo subgroups. Thus, for example, in the "other bulk" group, there are shortages in capacity for chemicals; in the general cargo group for containers, ro-ro, tropical fruits and bagged cargo.

Among the most important structural problems of rail transport are the following:

Determination of loads on railroad lines and border crossings. For Poland, the eastern border crossings, at which large districts for commodities transshipment arose, are particularly important; in 1976 over 40 million tons were transshipped on the Polish-Soviet border while about 20 million tons were transshipped across the Poland-CSSR border and about 28 million tons across the Poland-GDR border. This problem should be fully solved by the largest railroad investment in Poland, i.e., the Katowice-Hrubieszow iron and steel sulfur (H-S) line. It is envisaged that in 1981 when the line will be in operation it will haul about 12 million tons of ore in non-transshipment transportation. The H-S line from the USSR border near Hrubieszow to the Slawkow-Ciesle station at the Katowice Iron and Steel Works is 397 kilometers long. Seventeen large stations will be built along this line. In addition to hauling bulk cargo (ore, coal, sulfur), the H-S line will make it possible to haul without transshipment certain general cargoes that are particularly sensitive to transshipment. In Polish exports such cargoes are the very perishable ones hauled in refrigerator and isothermal cars; in import with the USSR these may be cargoes of low technical transportability, i.e. rolls of paper, asbestos-cement panels, automobiles, tractors, etc. Transport of general cargoes on the H-S line will be practical when forwarding-transport bases, in which forwarding, customs, storage and similar functions will be performed, are established along the line.

Improvement in organizational-technical efficiency at the joint border stations. The bilateral Soviet-Polish agreement (which established the details of the Agreement on International Railroad Traffic (SMGS) [Russian abbreviation] and General Conditions of Delivery (OWD) [Polish abbreviation] provides that the receiving railroad does the transshipping. This means that the following commodities are transshipped on the Polish side:

1. Those imported to Poland from the USSR.
2. Those imported to Poland from other countries and hauled in transit by rail through the USSR.
3. Those exported by the USSR to Western Europe.
4. Third-country commodities hauled in transit through Poland in East-West-East relations.

In 1978, 11 commodity border crossings to which specific forwarding activities were assigned, were in operation on the Polish-Soviet border. The most important ones comprise transshipment districts. In terms of number of transshipment and forwarding operations, the Malaszewice-Terespol-Brest district is the largest; the most tonnage is transshipped in the Zurawica-Medyka-Mosciska district. The first of these districts leads in service in transit (70 percent) and in terms of the cargo groups the general cargo transshipments are very important there.

The Zurawica-Medyka-Mosciska transshipment district is a "dry port" for bulk cargoes; the main problem is lack of directional balance in sending and receiving. Shipments to the USSR are 15 times less numerous than receipts from the USSR. This makes for real difficulties in transport organization.

The correct distribution of transshipment tasks among the particular transshipment districts and border stations is based on familiarity with the transshipment requirements of the involved parties and the appropriate transshipment capacity of the individual stations. The first element contains a large dose of uncertainty. To eliminate this uncertainty, the Ministers of Foreign Trade and the Ministers of Transportation of the Polish Peoples Republic, the GDR and the USSR meet annually. Regarding the second element, border stations suffer from the same ailments that affect Polish seaports: insufficient mechanization of transshipment operations, insufficient warehouse space (two warehouses with a total surface area of 665 square meters) and a shortage of Polish State Railroads [PKP] rolling stock, which during this decade amounted to an average 3,000 cars in the Zurawica-Medyka-Mosciska district and about 1,500 cars in the Malaszewicze-Terespol [9] district.

Another serious problem is the irregularity of transshipments, caused by both the senders and the haulers; transshipment peaks usually occur toward the end of the accounting-reporting periods, i.e., at the end of the quarter or the calendar year. At that time, the PKP, fearing that its own system will be overloaded, does not assign cars to cargoes that are routed for the congested border stations. Colloquially speaking, this is called "closing the border", which is wrong, for border closing is a political act which in this postwar period has no place in relations with the USSR. There is also no justification for employing this concept, for during the period this restriction is in effect the border stations are executing their heaviest transshipment operations. In 1977 the PKP applied restrictions on shipments of Polish exports 39 times for a total of 120 days, and during the period from January to November 1978, restrictions were applied 26 times for a total period of 249 days. This proves that the difficulties discussed are increasing and their effects should be examined, evaluated and submitted to public control.

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[9] The situation is worsened by the already-mentioned lack of synchronization in the forwarding areas of stations on both sides of the border, which makes it necessary to pull cars from all over Poland to the Zurawica-Medyka district, for example.

Other serious problems requiring international cooperation include the following:

1) Introduction of new hauling technology (transport by use of pallets and containers) [10];

2) Improvement in utilization of railroad rolling stock in international transportation, particularly within the framework of the Joint Railroad Car Pool [OPW]. Constant hold-over of OPW cars by foreign railroad administrations is noted; there is a shortage of about 6,000-7,000 gondola cars in the PKP;

3) Modernization of railroad routes serving ports and coordinating their traffic capacity with expansion of port capacity.

The most serious structural problems in the area of pipeline transport are:

--adapting the transmission capacity of the pipeline system, particularly crude oil pipelines, to the anticipated growth of the refinery industry (about the year 2000, it is expected that six refineries will be functioning, processing 15-18 million tons of crude annually: Plock, Gdansk, Blachownia and Czechowice, Szczecin, Poznan, Wroclaw);

--taking into account changes in trends in supplying Poland with crude oil (the increased importance of shipment by sea is the most significant change).

In the area of motor transport the most serious structural problems are:

--expansion of an international network of motor routes, the most important of which for Poland are the N-S highway (Gdansk-Warsaw-Krakow-Katowice-Cieszyn-Sofia) and the O-W highway (Berlin-Swiecko-Poznan-Warsaw-Terespol-Moscow),

--expansion of road border crossings.

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[10] The exchange of commodities on pallets between European CEMA countries, with the exception of the USSR and the SSR, takes place within the framework of the European pallet park. It is necessary that a separate agreement on this matter be concluded between the Polish Peoples Republic, the USSR and the GDR. Insofar as haulage in large containers is concerned, attention is called to the fact that the agreement signed in 1966 on a joint container park has not yet been implemented due to controversies concerning settlement of accounts for transit of containers and the financial responsibility of the railroads.

In inland water navigation, the main structural problems appear to be:

--ensuring return cargoes for Polish barges, which now return empty from Western Europe,

--making the Vistula River suitable for servicing seaport needs,

--incorporating Polish waterways into the European system of inland navigation by building the Oder-Danube-Elbe canals and the Lublin canal,

--instituting hydroengineering works, conducted jointly with neighboring countries, linked to the construction and operation of border waterways.[11]

In the area of air transport, which only recently attained its rightful standing in the country's transport policies, the most important structural problems are:

1) production of aviation equipment for passenger and freight transport requirements,[12]

2) training of flight, engineer and dispatch personnel.[13]

In every branch of international transport, and particularly where there are quantitative restrictions on transport, i.e., in motor and air transport, the range of hauls made results from the content and scope of international transportation agreements. Some of the issues can be settled multilaterally, others are best settled bilaterally. Some of them must be settled by way of government decree and many matters, particularly those concerning commercial activities of transport enterprise, are best left to be settled by the enterprise itself. Without going into an analysis of this matter, attention should be called to Poland's rather extensive activity in this field. For example, in the area of road transport, we had 27 such agreements at the end of 1973. In air transport, there were 54 such agreements.

Long-range State investment policy and foreign economy relations policies concerning transport should strive to create conditions for transport enterprises that will permit them to fulfill their functions in behalf of Polish foreign trade and the balance of payments.

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[11] At the present time, on the initiative of the CSSR the upper Oder River, from Chalupek to Kozla) is being adapted to haul oversize cargoes.

[12] Poland cooperates with the USSR in producing the IL-86; it is also a party to the agreement on international specialization of aviation overhaul equipment (CEMA 1977).

[13] Polish personnel will be trained at a joint Soviet-Polish training center beginning in 1981.

9295
CSO: 2600

MAOIST ORGAN REPORTS LIPINSKI'S CRITIQUE OF ECONOMY

Oslo KLASSEKAMPEN in Norwegian 3 Mar 80 p 12

[Text] Capriciousness in the management of Poland's economy has created great bottlenecks which limit general economic development. Because as much production as possible must be exported to pay back a foreign deficit of $17 billion it is not possible to prevent domestic shortages of goods in the immediate future years. Inflation will be at least 10 to 12 percent

These were some of the points emphasized by the 91-year-old Professor Edward Lipinski at a lecture at the Social-Economic Institute at the University of Oslo on Tuesday. The Polish professor was visiting Norway as a guest of the Norwegian PEN Club, and KLASSEKAMPEN received a special invitation from Professor Johan Vogt to be present during Lipinski's lecture.

Cyclical Crisis

Lipinski pointed out that in theory Poland has a planned economy. That should ensure against cyclical disturbances such as occur in capitalistic countries. There should not be crises and there should not be periods of decline followed by periods of advance. But in fact there are such cyclical movements in the Polish economy. There were crises in 1957, 1970, and now in 1980. The explanation is that the economy is not planned, it is capriciously managed.

When Gierek came to power after December 1970 he promised to create a new Poland with emphasis on modernization and industrialization. He gambled on aid from abroad. Large investments and some economic reforms led to a period of prosperity. Lipinski believes that Gierek allowed excessive wage increases. That sharpened the tendency toward inflation.

Forced economic development lasted for 4 years. The economic situation improved, and people were more satisfied. Lipinski believes that 4 years was too long, and he points out the mistakes that were made.

Financing

In the first place new businesses were financed with foreign loans which were to be repaid by exporting manufactured goods. That did not work, because the lack of raw materials, building materials, etc. meant that production did not get started soon enough, and meanwhile foreign obligations rose to at least $17 billion. In 1979, 30 percent of the new investment could not be utilized because of raw material and building material shortages. Now it is necessary to export as many other goods as possible to reduce the debt, and therefore Polish timber, coal, and meat go to export. These are goods which are in extremely short supply in Poland. So the raw material shortage grows at home, because they are needed for export. At the same time production has fallen even more since necessary raw materials and machinery can not be imported because of the trade imbalance and the foreign debt.

Farming

The second major error is the party's unsuccessful farm policy. Early in the 1950's collectives were organized in the country. The forming of collectives was stopped in 1956 because the farmers opposed it. Farming in Poland is mainly based on small farms. But the farmers are uncertain of the future, and do not invest. Shortages of machinery, electric power, feed, etc. increase the tendency toward low productivity. Lipinski said that Polish cows produce on the average half as much milk as Norwegian cows. Instead of buying machinery from abroad Poland is forced to buy feed from abroad. This undercuts the possibility of improving productivity. Before the war Poland exported both corn and meat.

Bottlenecks

The third major mistake according to Lipinski was that the choice of priorities was the same as in the Soviet Union. This has meant that electric power, farming, and transportation are seen as being of lesser importance. Now the shortages of electricity and transportation are so extensive that they cause major bottlenecks and interfere with the development of the priority sectors. Businesses often have to stop production because raw materials have not arrived or because electricity is not available. Lipinski saw this happen every week in vulnerable industries.

A fourth mistake is in how businesses are evaluated. A widespread system is that businesses will be seen as effective the more the manufactured goods are worth when c[illegible]ed to the raw materials. The problem is that this is calculated from [illegible]ch it actually costs to produce the goods. The greater the production costs the greater the increase in value and therefore the more "effective" the business. The result is that management is not interested in saving, but in increasing production costs. The social result is inflation.

Planning

The fifth mistake lies in the arbitrary way the planning is conducted. Polish economic plans are not built on scientific research. They reflect the ambitions of powerful pressure groups, both in the party leadership and the leadership of the different industry sectors. The result is that each business gets each year a carefully detailed plan with goals for quality, capital accumulation, production costs, consumption of raw materials, quantity of production, number of workers, etc. The task of management is to fulfill the plan. There is no possibility of independent decision. If the plan is fulfilled the reward comes in the form of investment, etc. the next planning year. This causes the business managers to be against any change, such as improvement in technology, new products, and against any change in organizing the work—because this can hinder the fulfilling of the goals for the current year.

Prices

A sixth mistake exists in the method used to establish prices. For many years Poland has been involved in an extensive and difficult price setting system which frequently causes a lack of relationship between actual production costs and the price to the consumer.

To a certain extent these are problems which we recognize as existing in Norway. Lipinski mentioned that in Poland it costs the equivalent of 2.80 kroner to produce a liter of milk which sells for 70 ore. It is difficult to change the price because the consumers are opposed. Also, inflation is at least 10 to 12 percent. Lipinski said that a revolution is needed to change the price system, and that he is opposed to any free enterprise system.

Finally Lipinski said that economic systems must be arranged so that they function rationally—not arbitrarily as they currently are in Poland and the Soviet Union—and at the same time they must allow for creativity, for new methods, new goods, and new technology.

9287
CSO: 3108

LOT AIR FREIGHT CHARTERS AID FOREIGN TRADE

Warsaw HANDEL ZAGRANICZNY in Polish No 11, 1979 pp 52-54

[Article by Elzbieta Daszkiewicz]

[Text] A specific form of transporting freight by air, namely commodity charter flights, have been developing particularly dynamically in recent years.

What is their place in the current classification of flights with regard to type of usage? Are they cheaper, more expensive method of transporting freight in comparison with regular transport means? Why are Polish foreign trade enterprises using them in very limited fashion and is this justified?

The present article is an attempt to answer these questions.

In contemporary air transport, we can differentiate between two basic types of use:

--regular flights (also known as scheduled);
--irregular flights (unscheduled).

Regular flights are used by airlines on the basis of a permanent published schedule of flights, including the name of the carrier, days of service, hourly schedule of flights, type of aircraft, and flight route. Such a defined flight route used by the carrier at regular time intervals is called its regular connections or regular line. Regarding the items to be shipped, the regular lines are divided into:

--regular passenger lines;
--regular freight lines.

It is necessary to emphasize that freight shipments are made also by regular passenger lines, within the framework of the available commercial capacity of the aircraft not used for transporting passengers and their baggage. The basis for accepting cargo for scheduled transport via a specific line (passenger or freight) is booking.

The second group of airlines, large and disunified internally, are the irregular lines, otherwise known as nonscheduled lines. Irregular lines are organized by carriers ad hoc, to the extent of increased demand for transport services (in the area of transporting passengers or freight). They are divided into the following categories:

--supplementary flights,
--extra flights,
--extra sections of scheduled flights,
--charter flights (hired),
--special flights.

The common attribute of all the abovementioned nonscheduled flights is their flexibility (increased demand for a certain type of transport service, not able to be met in the transport capabilities offered in scheduled connections), but nonetheless these are differentiated among themselves by the principles of cost and revenue calculation. In this regard, the most distinct type of nonscheduled flights are the hired (charter) flights.

In this instance, whoever faces an increased demand for transport services in a given situation concludes a charter agreement with the carrier on the strength of which he hires an aircraft to handle a specific shipment. In freight charter flights, the charterer is a foreign trade enterprise, and the sender or recipient of the goods is the expeditor or shipping agent. In Poland, trilateral charter agreements are often concluded among the carrier, the foreign trade enterprise, and the C. Hartwig International Forwarding Enterprise (PSM) of Warsaw as the expeditor.[1]

In the charter agreement the parties specify:

--the type of aircraft hired;
--its cargo capacity and power;
--type of cargo;
--flight route;
--date and timetable of the chartered flight or their series;
--packaging type, dimensions, vital features of the load, and special requirements pertaining to the shipment (e.g., in the case of chemicals, livestock, etc);
--the cost of the charter and conditions of payment;
--methods of special adaptation or additional special outfitting of the aircraft; and
--provisions concerning legal and judicial liability, and responsibility and agreed penalties.

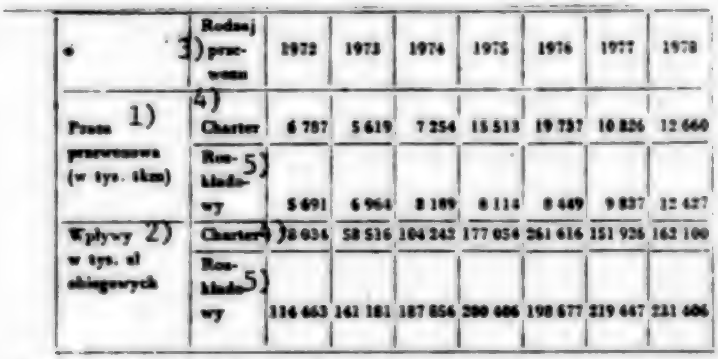
In the Polish case, there have not as yet been any agreements for the hiring of an aircraft for a time period ("time-charter" in English), although on numerous occasions Polish Airlines [LOT] and Foreign Trade Enterprises (PHZ) have concluded charter agreements for a series of hired flights, e.g., 100 over 3-4 months--PHZ "HORTEX," "ANIMEX" Import-Export Agency, and TEXTILIMPEX United Foreign Trade Enterprise.

Charter freight flights, as with other unscheduled flights, are organized when the transport needs announced by PHZ are not covered by the transport capability of regular lines. An additional basis for organizing hired freight flights could also be the specific features of the cargo, which would make it difficult or even impossible to ship via scheduled passenger lines.[2] This chiefly concerns the shipment of livestock, chemicals, and refrigerated or frozen articles without isothermal packing.

In Poland, the dynamic development of freight charters developed at the end of the 1960's and the beginning of the 1970's, when freight services on regular lines began to fall due to the introduction of the TU-134 jet aircraft usage. That aircraft, faster, more modern, and more comfortable than the IL-18 aircraft previously used on international lines, however, was characterized by a smaller cargo capacity.[3]

On the other hand, the announcement by Polish foreign trade of a series of special shipments (livestock, fresh fruit) also contributed to this development. In conjunction with the growing need for this kind of shipment, LOT decided to withdraw from passenger service and adapt one (1975) and then a second (1976) of the IL-18 aircraft for freight usage. Up to this point, charter freight shipments had been sporadically made by passenger craft IL-14 and IL-18, from which the seats had been removed.

Comparison of Transport Operations and Revenues from PLL LOT Chartered and Scheduled Transport of Commodities in the Years 1972-1978



•	3) Rodzaj przewozu	1972	1973	1974	1975	1976	1977	1978
1) Praca przewozowa (w tys. tkm)	4) Charter	6 787	5 619	7 254	15 513	19 737	10 826	12 660
	5) Rozkładowy	5 691	6 964	8 189	8 114	8 449	9 837	12 427
2) Wpływy w tys. zł obiegowych	4) Charter	8 036	58 516	104 242	177 054	261 616	151 926	162 100
	5) Rozkładowy	114 663	141 181	187 856	290 606	198 677	219 447	231 406

6) Źródło: PLL LOT; opracowanie własne.

Key:
1) Transport operations (in thousand kilometer tons)
2) Revenues in thousand negotiable zlotys
3) Type of transport
4) Chartered
5) Scheduled
6) Source: PLL LOT; author's calculations

As the above numerical data indicates, Polish freight charters are characterized by a large growth dynamic, both in quantitative and value (revenue) terms. In the course of 5 years (from 1972 to 1976), the size of both these indicators has tripled. Nonetheless, in contrast to scheduled shipments, this growth is not uniform. And so, in 1973 there was a significant drop in these shipments in comparison with the achievement of 1972 (from 6,787 to 5,619 thousand ton -kilometers), caused chiefly by the world fuel crisis. Restrictions on aircraft fuel affected charter flights first,[4] and caused a limitation of their usage. On the world scale (countries belonging to ICAO), there followed a [illegible] in irregular freight shipments by 14.3 percent (from 2,340 million tkm in 1972 to 2,005 million tkm in 1973).[5]

Another decline in charter freight shipments of LOT followed in 1977 as a result of a decrease in equipment possibilities of the enterprise in the field of cargo planes.

Beginning in 1975, shipping loads handled by LOT in freight charters exceeded the level attained in regular shipments. Freight charters of Polish air carriers ceased to be a supplement to regular shipments, becoming instead equal in terms of work handled.

Let us now look at how the value indicators of comparative types of shipments line up.

The revenue per 1 kilometer ton handled in LOT charter freight shipments (-12.8 thousand zloty/tkm) is lower than the comparable indicator in regular shipments (-18.62 thousand zloty/tkm). Does this also mean that this is a lower cost per kilometer ton for the dispatcher, the foreign trade enterprise, carried in chartered cargo shipments?

Yes, in many instances, but simultaneously an answer to that question is impossible without taking into account the separate principles of calculating the costs of a chartered flight.

Charter flights are arranged according to the price agreed upon by the parties (carrier and hirer). The basis of this accord is the preliminary calculation of the costs of running the chartered flight, as done by the carrier. The following variable costs influence this calculation:

1) the costs of airplane fuel needed to fly the plane on the specified route, as well as returning it to the home base (excepting the fuel costs for the later return of the plane to the storage airport);

2) costs for landings, takeoffs, transits over foreign territories, and ground services (handling) of the plane in individual ports on the route;

3) costs of meals, transportation, and overnight lodging for the crew, to the extent that the distance of the flight justifies such overnight arrangements (for freight planes without a crew deck);

4) costs of technical servicing for the plane;

5) variable payments and social insurance for the crews;

6) special costs (e.g., costs for adapting the plane, etc), as well as the following fixed costs:

--amortization of the airplane,
--insurance costs,
--regular wages of the crews,
--special costs: departmental; plantwide; selling costs (provision for the agents).

The price of a charter for national contractors is established by LOT on the basis of covering at least the variable costs, but for foreign contractors on the level of full costs--in both cases, with the addition of a planned profit for the carrier.

The characteristic aspects of calculating costs of a rental flight are:

--express not only the costs of directing the flight over the designated route by the hirer, but also the costs of transferring the plane to/from the home port (these are empty charter transfers, so-called "empty legs" or ferry flights);

--the independence of costs (and, hence, the charter price) of the actual use of the commercial capacity of the airplane;

--their independence of the IATA tariff levels binding in a given situation on regular lines.

For the foreign trade enterprises, in practice that means aiming for the maximal usage of the commercial capacity[6] of the rented aircraft to lower a one-time shipment cost. For indeed, the PHZ calculates the transaction and the analysis of the cost-effectiveness of using air transport on the basis of a one-time cost. In regular freight shipments, the point of departure for such a calculation is the IATA tariff for shipping 1 kilogram of cargo of a given type. But in charter shipments, the offer of the carrier includes the price of the chartered airplane for the designated route plus the transfers, without regard for the weight of the shipment. In its own field, the PHZ calculates the transaction in the following way (import transactions concluded on FOB terms--on the example of importing fresh vegetables by the PHZ HORTEX):

--dividing the price of the charter by the commercial capacity of the airplane (with regard to its inherent potential for usage with the specific cargo),

--adding the obtained effective unit cost of the shipment to the price of purchase FOB,

--adding the import duty plus its own commission, in this way arriving at the sale price.

According to this price, the PHZ gets together with the organization for domestic trade (wholesale). The decision to select a chartered air shipment is made only after:

--the calculation by the PHZ of the selling price, after adding in the wholesale and retail profit margins within the limits decided by the State Price Commission (PKC) or the appropriate ministerial organ, to arrive at the retail price of the given item;

--the comparative cost-effectiveness and derivative-effects analysis argues in favor of this type of shipping over maritime, split (sea/motor), or regular airline shipping.

There exists a universal enough conviction among Polish transport users that charter air transport of cargo has the highest cost-effectiveness. This is not correct, for in many cases, particularly on the longer routes (over 1,300 km), charter air transport is cheaper than regular, even without regard for the derivative costs. Nonetheless, however, in real calculations the PHZ should take into account all elements, both costs and derivative effects. The following derivative effects argue on behalf of selecting charter air transport: absolutely the greatest time-saving, a decrease in the amount of handling of the shipment, especially transfers, savings on packing, a decrease in risk of both qualitative and quantitative losses.

The enumerated derivative effects mean, that PHZ are choosing charter air transport primarily:

--for serial, continual, and entire planeload shipments,
--for shipment of cargo with a low shipping tolerance, both natural and chemical (fresh fruit, articles easily spoiled, fashionable ready-made clothing, livestock),
--for fragile and other superurgent shipments,
--for shipping high-value cargoes.

A separate and more complex matter is the use of empty charter return flights. The PHZ hiring a plane for the shipment of export goods from, say, Poland to the Sudan very rarely will have available a quantity of goods for shipment in the reverse direction. In the majority of cases, such a return trip remains empty, causing the burdening of the charter shipment with additional costs for the "unproductive" flight of the plane in one direction.

In reality, the chief problem of organizing charter flights in the world is to eliminate or restrict empty flight segments. Either the air carriers should take up this task directly, or they should assign it to the cargo and shipping agents. Particularly the latter, being in close, constant contact with the shippers and receivers of cargoes, having familiarity with the amount, deadlines, and directions of shipped mass cargo, are undertaking such an organization of chartered flights, to limit empty legs to the utmost. In effect, it considerably reduces the cost of a one-time shipment for charter users. Part of the air freight agents even specialize in selling empty charter legs.[8]

In Poland, the only international air expeditor is PSM C. Hartwig-Warsaw. In the name of the majority of foreign trade enterprises, it concludes freight charter agreements with the air carriers and, in representing the interests of its shippers, aims for the optimal usage of transportation. This goal is served by, among other things: soliciting offers from different carriers, comparing them, and selecting the best; trying to reduce the one-time cost of freight shipments by putting together package shipments; initiating appeals to the IATA for an introduction of reduced special fares in regular air transport; and by using empty transfer flights for air charter transport. With regard to that last area, it is not intensive enough and does not produce the intended results. In Poland, the majority of organized freight charter flights are still used only in one direction.

Such a large number of empty flights is a significant reserve of shipping capability, the partial usage of which would contribute to a major reduction in the costs of charter shipping the freight of Polish foreign trade, and consequently, to the invigoration of the development of this form of air shipping.

At this point, it must be stressed that the soliciting of cargoes for the so-called empty leg charters could result in: either once-a-year, entire planeload shipments originating from one shipper, or those derived from various shippers and only consolidated by the expeditor in order to take maximum advantage of the empty leg of the flight. In the first instance, the acquired cargo preserves its charter qualifications and takes place according to the agreed price of the charter, as a rule low, for it involves the use of existing reserves of shipping capability. But in the second instance, the carrier is obligated to change the qualifications of the trip from charter to an additional flight, and apply the IATA tariff to the transport of the consolidated shipment. The practice of combining shipments derived from different shippers for the requirements of a chartered flight is forbidden by Resolution 045A of the IATA and by several national laws (e.g., of Japan, Great Britain, and Sweden).

The noted formal limitations make such soliciting more difficult in an organizational sense. Nonetheless, it should be taken up and consistently worked upon, in the obvious, broadly conceived interest of Polish foreign trade, and indirectly in society-wide interest.

FOOTNOTES

1. Participation of PSM C. Hartwig as a party of the Charter Agreement is required in the event it is concluded with foreign air carriers, but is desirable in agreements with LOT.

2. LOT does not yet possess regular freight lines.

3. The IL-18 aircraft, maximum capacity 12,000 kg, with full use of passenger seats carries from 2,000 to 4,000 kg of cargo; the TU-134--300 to 1,000 kg, respectively.

4. Several airports in the world have prohibited the refueling of chartered aircraft.

5. See K. Rutkow, "Charter freight shipments in world air transport," RYNKI ZAGRANICZNE, No 142, 29 November 1978.

6. Permissible on a given route.

7. This analysis is incorrectly dismissed by several PHZ, who limit themselves to comparing only the effective costs of alternative variants of shipping.

8. ACL (Atlantic Container Line)--Air Charter Division of Amsterdam makes use of empty charter returns on a continuing market basis. The Air associations of Osmiopool have also created an information bank of actual empty leg charters.

9175
CSO: 2600

MARKETING IN MARITIME TRADE DISCUSSED

Warsaw HANDEL ZAGRANICZNY in Polish No 11, 1979 pp 45-47

[Article by Longinus Smyrgala]

[Text] The protracted economic recession in the capitalist world with its inevitable effect on maritime navigation is causing more and more shipowners and navigation agents to become interested in the concept of transport service marketing, which is particularly useful in a buyers' market. Keen competition on the maritime transport international markets and the potential of gaining foreign-exchange profits suggest the advisability of seeking active forms of selling transport services and the application of a marketing concept in managing transport enterprises which sell their services for foreign exchange.

The application of a marketing concept in managing these enterprises means first of all that their activities will be based on analytical-research functions and on the acceptance of a so-called market orientation. The acceptance of a marketing sales concept for transport services by a transport enterprise requires that changes be made in the enterprise's structural organization to subordinate all elements of a system for intensifying sales of transport services. A market-oriented organizational structures has a marketing echelon, to which all individual units qualified to fulfill marketing functions are subordinated. However, the fact that the word "marketing" does not appear on the transport enterprise's organizational chart does not mean that this concept is not understood.

Although the concept of marketing is relatively new in maritime navigation enterprises, its main principles have long been known and applied in maritime transport management. Operational divisions have been coordinating ships, brokers and agents in seaports, deciding where and when ships should be sent. Decisions concerning the opening of a new connection have normally required the appointment of a special research team whose task it was to examine the supply and demand on a given route, to determine whether the navigation conference tolerates newcomers or opposes them, etc. Membership in the conference has eliminated the handling of such functions as selection of servicing ports, sailing dates, servicing frequency, and tariff-fixing, functions that normally belong to the navigation conference. Stimulation of demand for the lines' transport services was one of the primary marketing tasks of the navigation enterprise.

In view of the present complicated market situation in maritime transport, marketing can play an important role in improving the hauler's efficiency. Of particular importance is the market research function by which appropriate policies and strategies in various market conditions can be established. The complexity of market research in maritime transport and the linking of this research with marketing research in foreign trade places very high demands on the cadre fulfilling this marketing function. The main problem lies in recognizing the "primary" needs from which demand for maritime transport results. Therefore, it is indispensable that market research for analyzing exporters' and importers' distribution systems in foreign trade be expanded. The hauler's marketing goal is to induce potential service users to incorporate hauls by particular transport means and on a particular line into their distribution systems. Analysis of service-users' distribution systems should encompass the entire process of moving goods from the place of production to the place of final consumption, together with the storage process. The growth in transport costs has meant that marketing research conducted for purposes of foreign trade has, for a long time, had to be interested in the transport and distribution problem. The need to conduct market research within the framework of the hauler's marketing is relatively new, but the worldwide tendency to growth of demand for all kinds of services, including transport and forwarding services, has increased the importance of transport market research.

The activities of a transport enterprise on the market can be divided into three phases:

(1) market observation
(2) market research
(3) marketing

Insofar as market observation is concerned, this activity has long been applied on the transport market as an element of strategy. These observations were limited to the transport market itself, i.e. to supply and demand ratios, relative changes in share of market, price levels of individual haulers, with no reference to the total economy. However, transport market research should also include the total economy aspect. While these two stages are informational in nature, the third level, i.e. marketing, will be aimed at affecting the market by direct and indirect means (marketing instruments) based on acquired information.

The broad range of market information and the complex nature of transport market research requires appropriate organizational solutions. The assignment of special hauler and forwarding units for this purpose appears to be indispensable. These units should be responsible for all marketing problems and only within their framework should special organizational units be appointed for comprehensive transport market research. Today the largest line to sell transport services--Polish Ocean Lines--has an assigned unit which could also conduct market research, the Polish Ocean Lines Navigation Lines Research and Development Center, but the lack of competent scientific marketing cadres makes it difficult to fulfill this function at this time. The Maritime Institute, on orders from shipowners, conducts much research work of a transport market analysis nature, but it would be difficult to require a scientific institute to also conduct current observations of transport market changes, which occur almost daily. It is essential that there be a regular transport market research based on current information recording and market development forecasts. The institution best equipped to follow continuous transport market changes is one which "lives" off the market. This, without a doubt, is the forwarding agent.

The forwarding agent is even called "the party most interested in market research and marketing in transports".[1] Acceptance of the marketing concept by the forwarding agent would mean that he must expand the scope of his activity and the the roles of transport adviser and transport market researcher must be linked in order that society's transport needs be better satisfied. At the same time, the forwarding agent's method of operation and thinking must be presented. Routine activities will be replaced by ETO [electronic computer technology], however, the forwarding agent's workers will have to employ their experience and ingenuity in solving their customers' important transport and distribution problems.

Based on the market research conducted, the international transport enterprise can develop a market strategy embodied in a marketing-mix comprised of a combination of marketing instruments. Although a socialist enterprise has less freedom in making a decision, as compared to its capitalist partners in international transport markets, the management evolution in socialist countries is proceeding in the direction of evaluating the activity of enterprises by using economic criteria and freeing more initiative on the part of management units. For example, the principle gauge in the Polish Ocean Lines is the profit rate and foreign-exchange surplus. The work force that participates in enterprise profits becomes interested in obtaining ever-higher incomes. This can be achieved by better satisfying customers' needs.

An essential feature of the maritime transport enterprise should be striving maximization of differences between production value and value of consumed production capacity, which in financial terms may be equivalent to profit maximization. Such ranking of a socialist enterprise's goals in maritime transport creates favorable conditions for the application of marketing concepts.

Based on his ability to discern the market of navigation services, the shipowner must develop a marketing policy that will maximize profits by maximizing sales of transport services and by best utilizing hauling potential.

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[1] D. Hunkar, "Marktforschung und Marketing in der Spedition", VERKEHRSANNALEN, April 1971, p 342.

In view of keen competition on navigation markets, the shipowner must keep track of trends in hauling technology developments and adapt his own rolling stock to these changes. Using marketing nomenclature, the shipowner should conduct the appropriate product policy in order to submit an offer of service in accordance with customer requirements, competitive with other sellers of transport services. The shipowner enterprise, wishing to act in accordance with modern marketing principles, should produce and sell those services for which there is a demand, and not attempt to sell that which can be easily produced. There must be a compromise between market demand and physical and economic production capacity.

An example of a marketing approach to transport is an offer of complete transport service in the form of a transport chain from the point of production to the point of consumption, or portal-to-portal service. This permits development of a unified technology for hauling goods in the form of cargo units, which simplifies the hauling cycle, due to the unchangeability of the cargo unit's form during the entire transport chain. The present changes in line fleet development are towards containerization and introduction of a ro-ro system in general cargo hauling.

In the new economic system in maritime navigation in Poland, the shipowner himself must cover all current and investment costs, which should persuade him to take a closer look at the marketing concept. Difficulties in executing planned tasks, expressed in profit and accumulation figures, result both from recessions on navigation markets as well as from decreased competitiveness of the Polish commercial fleet, which from the technical standpoint and from the average age of the ships is at the bottom of the European shipowners' list. The present poor business outlook in the shipbuilding industry is the reason why many Third World countries obtain used tonnage at low prices and also order new tonnage from shipyards at favorable prices, which still further worsens the Polish fleet's position that in any case cannot compete on a one-to-one basis with modern fleets of economically developed capitalist countries. A definite improvement can be obtained by ordering modern, specialized tonnage such as container ships, ro-ro ships, refrigerated vessels, etc., by Polish shipowners from domestic and foreign shipyards which offer very favorable financial conditions. Operation of obsolete tonnage under present market conditions means loss of highly profitable cargoes and lowering of transport service prices to compensate customers for lower quality of these services.

The conduct of an effective policy on maritime transport services, however, depends not just on shipowners but also on investment policies in seaports, which should be directed towards integrating maritime transport with the transport support base system. A specialization of port engineering potential follows, along with subordination of the scope and character of port activities to the transport systems, which further expands the scope of the portal-to-portal service concept. But the present state of ship servicing in Poland still leaves a great deal to be desired. Up to now, transshipments in ports increased faster than port transshipment capacity. The lack of railroad cars made it impossible to efficiently haul goods into the country's interior. This clogged the warehouses and storage yards, mainly with imported goods. The present deterioration of ship servicing now occurring because of the increase in general cargo transshipment labor-intensiveness, can be stopped only when transport systems which facilitate transshipment are introduced in Poland. The introduction of a container system of transport is dictated both by economic advantages as well as by requirements of Western contractors who are interested in portal-to-portal haulage. Changes that have occurred in hauling technology in maritime transport very importantly affect qualitative changes in remaining elements of the transport chain, shifting domestic transport to a higher level of technological development.

The ro-ro system (roll on/roll off) which is now firmly entrenched in short-range navigation, has not yet received proper recognition among our transporters. Examination of maritime transport services in isolation from services of other haulers in the transport chain indicates that the marketing concept is not being considered, a concept which is a condition for success on contemporary transport markets. Cooperation among participants of the transport chain requires a correct approach to the "through transport philosophy" concept, which means that the shipowner must assume responsibility for complete transport service. In the ro-ro system, it is more appropriate to think in terms of land or even air transport than maritime transport. As opposed to the container system which requires large investments in terminals, rolling stock and containers, the ro-ro system is much cheaper and speeds up and improves transshipment comparably to the container system.

Introduction of the container system in Poland is linked to application of modern methods of transport management and marketing.[2] In connection with utilization of engineering potential in container haulage, it has become very important to institute intensive marketing activities to increase the concentration of containerized cargoes through the port in Gdynia. This would improve the shipowner's operational results and, as a consequence, would offer the customers better hauling conditions. The poor interest in this form of haulage shown by domestic shippers means that promotional activities must be introduced to convince them of the expediency and profitability of these transport services. The transport enterprise is, on the international transport markets, both a producer and a seller of its services, and that is why it is interested in such effects on the market, so as to best utilize its hauling capacity. Thus it can use promotion and distribution policies as marketing-mix elements.

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[2] I. Nawrocka, "Marketing Transport Services", in a multi-author publication entitled, "The Container Transport System", Warsaw, 1974, p 428.

The poor business outlook in navigation markets and the economic recession in the capitalist world, has caused a drop in supplies of cargoes on many maritime lines, which has forced the Polish Ocean Lines to use its own activization machinery on foreign markets more widely than heretofore. The broad participation of shipowners' workers in international conferences and personal talks with shippers contribute to expanded export of services and increased haulage between foreign ports. The Polish fleet is geared not just to service cargoes of Polish foreign trade, but to better utilize its hauling capacity it must conduct canvassing activity in foreign ports (traveler) in order to complete its cargoes. Expansion of individual lines and increase in sailing frequency has resulted in a growth of demand for intermediate cargoes. We can thus speak of the increasing profit-making role of the Polish fleet as an exporter of transport services.

In addition to his own canvassing apparatus in the form of Polish Ocean Lines representatives in foreign ports and the operating department of the individual lines which "mate" cargoes, the shipowner makes broad use of the services of intermediaries, the line agents, acting by agreement with the shipowner. The choice of an agent is a very important decision for the shipowner, for the financial results of tonnage operation are very dependent on the agent's activities. Within the shipowner's marketing framework, the selection of the agent falls under distribution policy. The canvassing and mating of cargoes is one of the agent's basic tasks. By canvassing we mean the seeking and obtaining of hauling commissions for ships on a given market. In accordance with the marketing concept this activity belongs between distribution and the promotion of transport services. The result of the canvassing agent's activities should be placement of cargoes for haulage, or mating.

Although we have heard the opinion recently in navigation circles that navigation agents are hard pressed in an economic depression, the opinion is also heard that they can be more important than previously if they systematize and specify their marketing.[3] The agent's activities consist of establishing and maintaining constant contact with the cargo owners or the forwarding agents and offering, in the name of the represented shipowner, his transport services. The agent informs the shippers of the sailing schedules and gives them detailed information on amount of tonnage employed on a given line, the hauling conditions, and various forms of advertising. In case of international haulage, it is important to link the advertising activity of the hauler and agent with the State's total economic propaganda on the international arena. Advertising has two aspects: informational and canvassing. Advertising should emphasize the enterprise's size and traditions, the advantages of the means of transport used, qualifications of personnel, etc. The personal form of service sales is a very important factor in haulage of goods. Widely understood personal contacts of the shipowner's representatives with persons who are highly placed politically and economically make up "public relations" and play a very important role in shaping opinion on the enterprise.

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[3] "A Challenge", NORWEGIAN SHIPPING NEWS, December 1978, p 3.

Price policy is an important marketing element for the enterprise that is exporting transport services. The general principles of market price fixing in transport are also applicable to a socialist enterprise that operates on the international market. To ignore these principles could have a negative effect on the enterprise's financial results. The shipowner, who is a member of the navigation conference, normally benefits from conference tariffs that are based on the principle of market price orientation, i.e., they take into account both demand (demand price elasticity) for transport services and the amount of competition from lines that are not members of the association, the tramp trade, and recently, from air transport. Thus a socialist enterprise benefits from the conference's monopoly price, obtaining a monopolistic price just as its capitalist partners, to the degree that market conditions permit. The amount of freight payment is an important element in the shipowner's marketing policy and although the setting of conference tariffs itself is part of the enterprise's management function, it normally conducts an appropriate contracting policy, granting discounts to customers or fixing rates according to market conditions for which the conference has established "open rates". In addition to confidential discounts, an important tool of marketing policy can also be the granting of forwarding commissions for specific efforts in steering cargoes to ships of a certain line. These contribute greatly to increased canvassing effectiveness. It should be remembered, however, that the basic marketing principle that says that "only good commodities sell well", applies also to the sale of maritime transport services.

9295
CSO: 2600

HOUSING CONSTRUCTION PLAN, PROBLEMS FOR 1980 OUTLINED

Warsaw SLOWO POWSZECHNE in Polish 4 Apr 80 p 7

[Article: "Keys for a Million"]

[Text] The plan for 1980 anticipates that this year approximately one million people will receive keys to new apartments. It assumes the handing over for use of about 340,000 apartments, which is also to be supplemented by single-family housing. Thanks to this, about one million people will move into new apartments.

The performance of this goal will not be easy, especially since during the past year about 3,500,000 zlotys were not used for land development for future construction. As a result we must count upon difficulties created by parallel municipal services investment projects and housing facilities. According to estimated calculations about 55 percent of the housing construction must be completed simultaneously with engineering work. This will significantly complicate the completion of the tasks by the construction crews.

Ensuring housing construction a proper quantity of raw material and material will be a second important problem. Material difficulties do not contribute to a systematic completion of the tasks of construction and are the cause of many delays. Therefore, there is a need to increase efforts to ensure that deliveries of essential materials as well as modern machines, equipment, and means of transportation are more on schedule. Without this technical equipment, the construction industry will not be able to complete fully the tasks which increase every year. The problem of supplying technical equipment also applies to the municipal enterprises. The tempo of housing construction depends greatly upon the completion of their tasks. And therefore the supplying of the municipal enterprises must also be handled as an essential task conditioning the completion of the housing-construction plan.

The number of apartments will nearly double during the present decade (1970-1980). This became possible thanks to the expansion of the performance potential and the creation of a comprehensive housing industry. The commitment of more than 130 billion zlotys made possible the handing over for use of more than 160 housing factories and prefabrication plants. A growth in the funds earmarked for the building materials industry, land development, and heating took place. A rise in the average size of the apartments and their better finishing with new technical fixtures has accompanied the development of construction.

In all during the 1970s the dimensions of construction will reach a level of around 2.7 million apartments and will exceed by 1 million the amount of construction completed between 1961-70. During 1971-78 alone, 6.6 million people received keys to new apartments, and by the end of 1980 the number of people having received new apartments is supposed to increase to 9 million.

These undoubtedly large accomplishments cannot cover, however, the insufficient care for the already existing housing resources. Many apartments require capital repairs, the carrying out of modernizations. We cannot allow the gains of the past years, and frequently they are valuable facilities due to architectural reasons, to perish. The beauty of architecture lies, moreover, in the preservation of the most valuable facilities and in the skillful blending of new housing with old.

9329
CSO: 2600

ROMANIA

COTTON INDUSTRY SHORTCOMINGS EXAMINED, SUGGESTIONS MADE

Bucharest REVISTA ECONOMICA in Romanian No 8, 22 Feb 80 pp 6-7, 9

[Article by Gh. Draghici: "Requirements for the Exemplary Fulfillment of the Plan and Recouping Arrearages in Physical Production"]

[Text] A major condition for providing the economy with the quantities of production outlined in the sole national state plan is the steady and full achievement of physical production by each enterprise and industrial central. The recent session of the Political Executive Committee of the Romanian Communist Party's Central Committee and the Communique regarding the fulfillment of the 1979 plan, while appreciating the high growth rates and remarkable achievements recorded in all the fields of economic and social life in fulfilling the objectives of the current five year plan, at the same time pointed out the existence of certain serious deficiencies in some sectors in the manner of fulfilling last year's plan.

Among the products that were not produced at planned levels are cotton fabrics, whose level of production was not only below the planned level for last year, but even below the production levels of 1978. It is easy to understand that the failure of the Industrial Central for Cotton to deliver the full amount of cotton fabric outlined in the plan to customers created difficulties in supplying the clothing industry, cooperative units using cotton, the trade sector and the people.

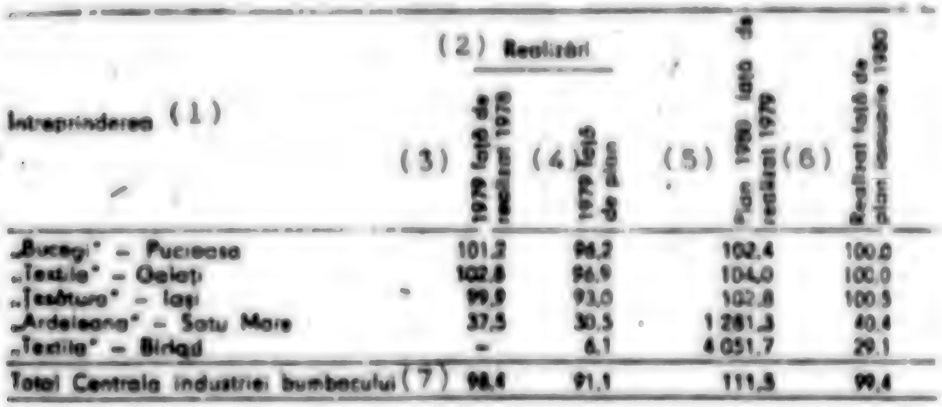
A Steady Rate of Production Requires the Elimination of Gaps in the Supply System

There were serious shortcomings in the central's production activities in making the main finished products at the enterprises (cotton fabric): 91.1 percent of the 1979 plan and 98.4 percent compared to the production in 1978 (see Table No 1). In January of this year, although there was an improvement in relation to the results obtained last year, the plan was not fully achieved (99.4 percent). One of the causes of this state of affairs is the insufficient quantitative and qualitative supply of some raw materials.

The disruptions that appeared in the area of supplying materials to the enterprises were brought about by the failure of certain suppliers to maintain a steady flow of deliveries, especially the Iasi Synthetic Fiber Enterprise's supply of polyester fibers. During last year, this caused a shortfall of over 900 tons of fibers needed in cotton blend fabrics. This was the cause of temporary interruptions in the production process at the mills in Bucharest, Baia Mare, Oltenita, Carei and Lugoj, and, at the same time, the cause of the lack of blended fibers at the mills in Pitesti, Slatina, Nasaud and other places.

Table No 1

Physical Production of Cotton Fabrics (in percent)



Întreprinderea (1)	(2) Realizări (3) 1979 față de realizări 1978	(4) 1979 față de plan	(5) Plan 1980 față de realizări 1979	(6) Realizat față de plan ianuarie 1980
„Bucegi" – Pucioasa	101,2	96,2	102,4	100,0
„Textila" – Galați	102,8	96,9	104,0	100,0
„Țesătura" – Iași	99,9	93,0	102,8	100,3
„Ardeleana" – Satu Mare	37,5	30,5	1 281,3	40,4
„Textila" – Bîrlad	–	6,1	4 051,7	29,1
Total Centrala industriei bumbacului (7)	98,4	91,1	111,5	99,4

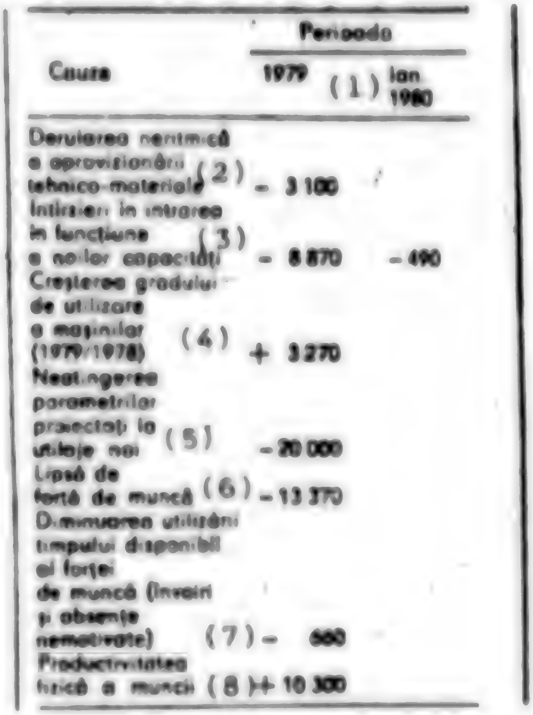
Key:

1. Enterprise
2. Achievement
3. 1979 Compared to 1978
4. Compared to the 1979 Plan
5. 1980 Plan Compared to 1979 Achievements
6. Achievements Compared to the January 1980 Plan
7. Total for the Industrial Central for Cotton

The efforts and actions to redistribute these fibers, whose stock levels in other mills of the central were also below normal, could not offset the irregular supply that decreased production by approximately two million square meters of fabric (see Table No 2). And, this dificiency is threatening the production for the first months of 1980. Urgent measures

Table No 2

Quantification of the Main Influences (Plus or Minus) Upon the Level of Production of Cotton Fabric (in thousands of square meters)



Cauza	Perioada	
	1979	(1) Ian 1980
Derularea neritmică a aprovizionării tehnico-materiale (2)	− 3 100	
Întîrzieri în intrarea în funcțiune a noilor capacități (3)	− 8 870	− 490
Creșterea gradului de utilizare a mașinilor (1979/1978) (4)	+ 3 270	
Neatingerea parametrilor proiectați la utilaje noi (5)	− 20 000	
Lipsă de forță de muncă (6)	− 13 370	
Diminuarea utilizării timpului disponibil al forței de muncă (învoiri și absențe nemotivate) (7)	− 660	
Productivitatea fizică a muncii (8)	+ 10 300	

Key:

1. January 1980
2. The Irregular Flow of Technical-Materials Supply
3. Delays in the Start Up of New Facilities
4. Increases in the Level of Machine Use (1979/1978)
5. Failure to Achieve Projected Parameters for New Equipment
6. Lack of Manpower
7. Decrease in the Use of Time Available to the Workforce (Permitted and Unauthorized Absences)
8. Labor Physical Productivity

and decisive actions by the central, the supply enterprises and the Ministry of the Chemical Industry are needed for the delivery of the contracted quantities of polyester fibers for the purpose of covering the minimum necessary amounts and, then, the complete normal stock levels for raw materials at the spinning and weaving mills.

At the same time, in addition to continuing actions to effectively redistribute temporarily available resources at some enterprises, it is necessary for the units to intensify actions to find, recoup and reuse any amounts of such materials, to strictly adhere to norms, and to reduce material consumption.

Another cause of the stagnation of certain facilities was the temporary shutdown of natural gas deliveries and electricity because of accidental interruptions or decreases in network pressure. In the first quarter of 1979, these events effected the "Dacia" Weaving Mill, the cotton industry and "Suveica" in Bucharest, "Textila" in Timisoara, the Textile Unit in Arad and so forth, resulting in a minus of 1.1 million square meters of fabric while the central saved, for the year, a total of 1,200 tcc of natural gas and 12.1 MWh of electricity. It is gratifying that, up til now, this shortcoming has not occurred again and, therefore,has not produced difficulties for the enterprises, which does not mean that these enterprises will not have to stay within the permitted norms and record significant savings in these areas of consumption.

A Path: Capacity-Parameters-Production, Where the Effects Must be Maximized

One of the important factors that makes it difficult to achieve the physical production indicator is the failure to start up new facilities contained in the plan on time because of shortcomings in fulfilling the called for investment program. In 1979, this was the factor that led to the failure to achieve nearly nine million square meters of textile products, primarily at the "Ardeleana" Enterprise in Satu Mare (achieved 30.5 percent of plan provisions) and the "Textila" Enterprise in Birlad (6.1 percent). Although in the first month of 1980 (see Table No 1) the level of plan achievement at these enterprises increased, there nonetheless are serious production facilities and quantities in arrears (Table No 2).

For example, at the Birlad Textile Enterprise the delays by the Iasi Construction and Assembly Trust in carrying out construction, as well as the delays in the delivery of 30 spinning machines, allowed the weaving section to be only partially operational, in stages, and only after delays of several months. The finishing section is still under construction, but the builder and user are working together to accelerate efforts to assemble the existing equipment. As a result, radical actions are called for and a greater efficiency is required in the measures taken in the working sessions of the joint commands that periodically meet for the purpose of rigorously adhering to all the obligations contracted by the customer, the builder, and the equipment or secondary equipment suppliers, without which production cannot be obtained in the planned quantities and timeframes.

Another important problem is the failure to use all machinery and installations at the projected parameters. Because of this last year, multiple dificiencies led to a minus of approximately 20 million square meters of cotton fabric in the textile enterprises.

Specialists in the central who followed this situation over 5 years came up with two findings.

The first showed that it is a factor external to the enterprises and is expressed by the impossibility of using certain machinery, without the risk of destroying it, at the parameters established by the designers. Because, these parameters are not the same as the ones in the prototypes provided by equipment suppliers and are less than the maximum possible that can be attained in use. Because of this, it is felt that some enterprises recently equipped with such machinery (in Calafat and Slatina, for example, as well as others) are producing approximately 10 million square meters per year less than the amount established in the estimates based on the projected parameters for this machinery. In these cases, the designers, builders and users, as well as the State Planning Committee, should take into consideration this hardly negligible aspect in more correctly determining the capacities of this machinery and the amount of production that can be achieved.

The second finding exclusively involves the manner and degree of use of machinery, which is substandard in numerous enterprises (Calafat, Slatina, Salonta, Nasaud, Tirgu Mures and so forth), causing an annual loss of another 10 million square meters of material.

Although in 1979, compared to 1978, there was an increase in production of over 3.2 million square meters of material on the basis of increasing the level of machine use, the reserves are much greater. In this situation, the solution is available to the units and it can be applied in adequate technical-organizational measures that lead to the elimination of unscheduled down-time for the equipment, better technical assistence in maintenance, use and repairs, improving professional qualifications, regular supply with raw materials and materials, and so forth. To this end, it is necessary for the relatively new enterprises to benefit from a greater degree of help from the specialists assigned to the centrals and appropriate enterprises and to improve, at the same time, technical assistance on shifts II and III.

Increasing Labor Productivity

A significant contribution to the achievement of physical production can be made by the accentuated increase of labor productivity. Certainly, this presupposes the fulfillment of certain quantitative and qualitative requirements. From the data in Table No 2 it can be seen that the achievements for this indicator, expressed in physical units, have been above the levels of plan provisions by approximately 10 million square meters. This is a positive factor, but only at first glance. Because, in reality, the planned time available for the work force was decreased by unauthorized and authorized absences that totalled a minus of 660,000 square meters of material, while during the same period tens of thousands of extra hours were worked to recoup arrearages and increase production. In this manner, the enterprises tried to cover, as much as possible, the shortcomings in physical production resulting from the above-mentioned causes, as well as the effective loss of manpower which equalled over 13 million square meters of products. In total, the amount of shortcomings in this area led to a minus of nearly four million square meters, which means that the extra hours did not succeed in completely eliminating other shortcomings. One measure which covers to a good degree the existing gaps is the effective increase in the number of machines that a worker can service at the same time. If during the previous year this action made an effective savings of 313 workers, this year, coupled with the degree of modernization that will be carried out, it will make an additional savings of approximately 300 workers.

One of the most serious shortcomings is the failure to achieve certain provisions on time as contained in the plan for technical-organizational measures upon which the increases in productivity were based. More precisely, we are talking about the Ministry of Light Industry's reallocation of funds needed by the central for the purpose of carrying out the projects for modernizing and automating certain production processes. It has been figured that by just replacing 30,000 classical spindles with another 20,000 spindles on automated machines tnere would be an annual savings of 4,200 people. For this, it would be necessary for the specialized enterprises of the Ministry of the Machine Building Industry to incorporate into production, produce and deliver these machines during these next years. However, currently these machines are not even in the prototype stage, a situation that will continue some of the difficulties in this sector of spinning and weaving with regards to employing the admissible number of workers and increasing labor productivity. It is necessary that the production of automated machinery be reconsidered and rescheduled in the interest of achieving the program for mechanizing and automating the production processes and increasing productivity.

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